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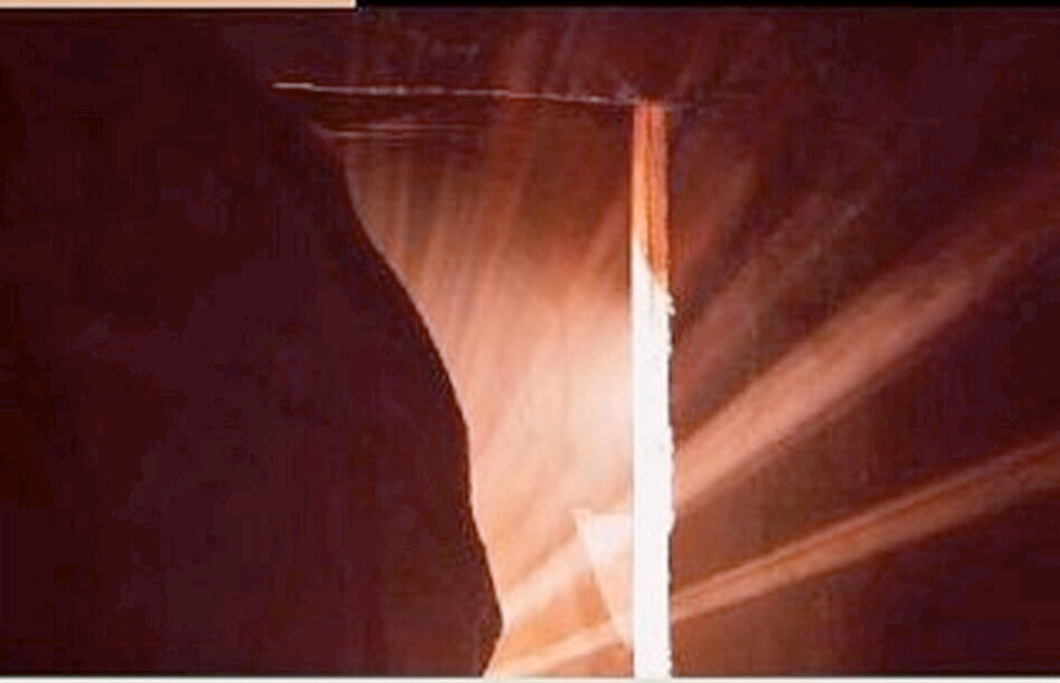

Miracles

God, Science, and Psychology in the Paranormal

Edited by J. Harold Ellens

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Miracles

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MIRACLES

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VOLUME 2
Medical and Therapeutic Events

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Psychology, Religion, and Spirituality

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This work on miracles is dedicated
To Rebecca and Brenda
Because they work miracles of healing
Every day.

I wish to express intense gratitude and high esteem for the meticulous and devoted labor of Beuna C. Carlson who read all the proofs with a sharp eye and sturdy hand for ferreting out errors. Surely the devil is in the details and she has mastered the devil.

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Series Foreword

The interface between psychology, religion, and spirituality has been of great interest to scholars for a century. In the last three decades a broad popular appetite has developed for books that make practical sense out of the sophisticated research on these three subjects. Freud expressed an essentially deconstructive perspective on this matter and indicated that he saw the relationship between human psychology and religion to be a destructive interaction. Jung, on the other hand, was quite sure that these three aspects of the human spirit: psychology, religion, and spirituality, were constructively and inextricably linked.

Anton Boisen and Seward Hiltner derived much insight from both Freud and Jung, as well as from Adler and Reik, while pressing the matter forward with ingenious skill and illumination. Boisen and Hiltner fashioned a framework within which the quest for a sound and sensible definition of the interface between psychology, religion, and spirituality might best be described or expressed.[1] We are in their debt.

This series of general interest books, so wisely urged by Praeger Publishers, and particularly by its editors, Deborah Carvalko and Suzanne I. Staszak-Silva, intends to define the terms and explore the interface of psychology, religion, and spirituality at the operational level of daily human experience. Each volume of the series identifies, analyzes, describes, and evaluates the full range of issues, of both popular and professional interest, that deal with the psychological factors at play (1) in the way religion takes shape and is expressed, (2) in the way spirituality functions within human persons and shapes both religious formation and expression, and (3) in the

ways that spirituality is shaped and expressed by religion. The interest is psychospiritual. In terms of the rubrics of the disciplines and the science of psychology and spirituality this series of volumes investigates the *operational dynamics* of religion and spirituality.

The verbs *shape* and *express* in the above paragraph refer to the forces that prompt and form religion in persons and communities, as well as to the manifestations of religious behavior (1) in personal forms of spirituality, (2) in acts of spiritually motivated care for society, and (3) in ritual behaviors such as liturgies of worship. In these various aspects of human function the psychological and/or spiritual drivers are identified, isolated, and described in terms of the way in which they unconsciously and consciously operate in religion, thought, and behavior.

The books in this series are written for the general reader, the local library, and the undergraduate university student. They are also of significant interest to the informed professional, particularly in fields corollary to his or her primary interest. The volumes in this series have great value for clinical settings and treatment models, as well.

This series editor has spent an entire professional lifetime focused specifically on research into the interface of psychology in religion and spirituality. This present set, *Miracles: God, Science, and Psychology in the Paranormal*, is an urgently needed and timely work, the motivation for which is surely endorsed enthusiastically by the entire religious world today, as the international community searches for strategies that will afford us better and deeper religious self-understanding as individuals and communities. This project addresses the deep psychosocial, psychospiritual, and biological sources of human nature that shape and drive our psychology and spirituality. Careful strategies of empirical, heuristic, and phenomenological research have been employed to give this work a solid scientific foundation and formation. Never before has such wise analysis been brought to bear upon the dynamic linkage between human physiology, psychology, and spirituality in an effort to understand the human mystification with apparent miraculous events in our experience and traditions.

For 50 years such organizations as the Christian Association for Psychological Studies and such graduate departments of psychology as those at Boston University, Fuller, Rosemead, Harvard, George Fox, Princeton, and the like, have been publishing important building blocks of research on issues dealing with religious behavior and psychospirituality. In this present project the insights generated by such patient and careful research are synthesized and integrated into a holistic psychospiritual worldview, which takes seriously the special aspect of religious tradition called miracle. This volume employs an objective and experience-based approach to discerning what happens in miracle stories, what that means, and in what ways that is an advantage or danger to our spiritual life and growth, as we pursue the irrepressible human quest for meaning.

Some of the influences of religion upon persons and society, now and throughout history, have been negative. However, most of the impact of the great religions upon human life and culture has been profoundly redemptive and generative of great good. It is urgent, therefore, that we discover and understand better what the psychological and spiritual forces are that empower people of faith and genuine spirituality to open their lives to the transcendent connection and give themselves to all the creative and constructive enterprises that, throughout the centuries, have made of human life the humane, ordered, prosperous, and aesthetic experience it can be at its best. Surely the forces for good in both psychology and spirituality far exceed the powers and proclivities toward the evil.

This series of Praeger Publishers volumes is dedicated to the greater understanding of *Psychology, Religion, and Spirituality,* and thus to the profound understanding and empowerment of those psychospiritual drivers that can help us (1) transcend the malignancy of our earthly pilgrimage, (2) open our spirits to the divine spirit, (3) enhance the humaneness and majesty of the human spirit, and (4) empower our potential for magnificence in human life.

J. Harold Ellens
Series Editor

NOTE

1. L. Aden and J. H. Ellens (1990), *Turning Points in Pastoral Care: The Legacy of Anton Boisen and Seward Hiltner*, Grand Rapids: Baker.

Introduction

J. Harold Ellens

As I noted in the introduction to volume 1 of this three-volume set, miracle stories live forever. They appear in all religious traditions, and though the traditions change greatly over the centuries, the miracle stories stay the same. Krister Stendahl, professor of biblical studies at Harvard Divinity School and bishop of the Lutheran Church of Sweden, wrote the foreword to Anton Fridrichsen's *The Problem of Miracle in Primitive Christianity.* In it he approved of Fridrichsen's "theological conviction that genuine faith and vital religion is and will remain mythical, miraculous, and resistant to theological reductionism—orthodox, conservative, liberal, or radical."[1] Regardless of the perspective one takes on the faith tradition that holds one's attention, the miracle stories remain the same kind of enigma from generation to generation.

The questions asked today by devoted believers and agnostic critics, by theological scientists and empirical scientists, by mythologists and rationalists, are the same questions as the ancient Greeks, Romans, and Christians were asking about the miracles reported and celebrated in their world 2,000 years ago. Numerous explanations of miracle stories have filled uncountable volumes over the centuries. None, so far, quite satisfies the hunger of the human mind and spirit for a final answer to the questions, Are miracles real, or a chimera of our imaginations? What really happened, and what does it mean?

Is it possible to devise thoroughly rational and naturalistic interpretations of this mystifying phenomenon, but then, when that is said and done, we have the sense that while the rationale holds up well enough, the intriguing center of the issue has not been exploded. Likewise, we may provide a

literal, psychological, or mythological explanation of the miracle stories and discover in the end that we have not quite understood the depth of the narrative that gives us the ultimate clue. We cannot escape the haunting suspicion that in the miracle stories, the transcendent world has somehow touched our mundane existence. That is true whether it is a biblical narrative or a newspaper report of some spontaneous remission of disease in the twenty-first century. Paul J. Achtemeier observed that, as regards our understanding or accounting for the biblical miracles, particularly those performed by Jesus and recorded in the Synoptic Gospels, in the end, we must face the fact that Jesus really did heal that demon-possessed boy in Mark 9, for example, and if our explanation does not reflect that forthrightly, we have distorted the forthright Gospel report.[2]

The 18 scholars who have joined me in this volume present the perspectives of serious-minded analysts of both science and religion. These perspectives vary as widely as the continuum of human imagination and analysis can produce. Some are sure that psychodynamics explain all apparently miraculous phenomena. Others are sure that miracles can be accounted for only as direct spiritual interventions of God's spirit and that they are enacted from the transcendent world. Still other scholars who have composed the chapters for this volume see clearly a more holistic view of the human organism and of history. Their chapters reflect ways in which God, science, psychology, and spirituality are profoundly interlinked and interactive and can be demonstrated empirically, phenomenologically, and heuristically as comporting with such a paradigm.

This quest for acquiring a more satisfying grasp of the meaning of miracles is popular and virtually universal among humankind. A recent journal article titled "Citizen, Heal Thyself" launched its investigation of spontaneous healings and other medically related paranormal phenomena in an intriguing manner. Speaking of people who had been diagnosed as terminally ill with such diseases as cancer and other advanced disorders, the author expostulated, "They should be dead. But a tiny number of people conquer lethal diseases. Are they just lucky—or can these rare self-healers teach us something?" After a careful and intriguing report on a number of miraculous healings, the author concludes her article by observing, "Although medical advances have dramatically improved outcomes in certain cancers—treatment of testicular cancer and childhood leukemia now routinely lead to cures—when it comes to many other cancers, modern medicine has yet to come close to nature's handiwork in inexplicably producing spontaneous remission without apparent side effects," such as those who have been miraculously healed, experiencing thus the "rarest hints of nature's healing mysteries."[3]

It is the focused intent of this volume to explore the answer to that question as a central part of our open-ended scientific quest for truth in the world of materiality, mind, psyche, and spirit: human and divine.

NOTES

1. Anton Fridrichsen (1972), *The Problem of Miracle in Primitive Christianity*, Minneapolis: Augsburg, 8.

2. Paul J. Achtemeier (October 1975), Miracles and the Historical Jesus: Mark 9:14–29, *Catholic Biblical Quarterly (CBQ)* 37, 424-451.

3. Jeanne Lenzer (September 2007), Citizen, Heal Thyself, *Discover: Science, Technology, and the Future*, 54–59, 73.

CHAPTER 1

God and Science

J. Harold Ellens

Today, nearly everyone knows the name and work of Richard Dawkins. He is busy proving that God does not exist. It is not clear from his work what kind of god it is that he is sure does not exist, but he is sure that science proves conclusively that there is no *divine* source, design, root, ground, or energy evident in the world as we are able to discern it. We need to take him seriously for a number of reasons. First, his professional pedigree is impressive: he is a professor of science at Oxford University in the United Kingdom. Second, his work is carefully reasoned and meticulous in attention to detail, so far as it goes. Third, he has published profusely and in a style that engages his readers, both laypersons and professionals. Fourth, his titles are winsome and intriguing and have drawn to his work a worldwide readership, indeed a surprising philosophical and scientific following.[1]

A couple of years ago, *Time* magazine featured a remarkable article by David Van Biema, which addressed Dawkins's case regarding God.[2] It posed Dawkins in dialogue with theist Francis Collins, which proved to be a stimulating and in some ways delightful debate about evolution and creation, particularly about the intelligent design (ID) argument. Collins is a genome scientist and pioneer. He perceives that the material outcomes of the genome project, thus far evident, point to God, and the God to whom the heuristic evidence points exists outside of space, time, and materiality. Collins is a straight-speaking Christian who was converted from atheism as an adult. His recent work on the evidence for theism, that is, for the belief that God is the source and sustainer of the material world, is titled *The Language of God: A Scientist Presents Evidence for Belief.*[3] The dialogue between Dawkins

and Collins took place on September 30, 2006, and the magazine article is a transcript of that exchange.

Dawkins's essential claim is that all the evidence that the empirical sciences can provide regarding the origin and nature of the material world leads inevitably and exclusively to the conclusion that the world that we can study scientifically is a product of natural causes. This conclusion is reinforced, he believes, by the fact that everything in the material world can be explained by processes of cause and effect, which we have identified as within the material world: we have analyzed them, and we can understand them virtually completely, without reference to transcendent sources or forces. Collins, however, is sure that the cause-and-effect dynamics evident throughout this material world is not in tension with, and certainly does not rule out, the presence of a creator and sustainer of the universes. Indeed, he confidently asserts that Dawkins's claim only explains our understanding of the causes and effects by which the material world functions and leaves out any reasonable accounting for its origin.

Moreover, Collins makes the telling point that humans experience a great deal of reality that is not material and not accountable in terms of what we know about material reality. He is referring to the real world of human experiences, which reflects much of the function of the human psyche, spirit, and parapsychological ways of knowing: intuition, ESP, prescience, and the like. While Collins does not say so specifically in his dialogue with Dawkins, it seems fair to say that if we concentrated on studying these dimensions of human experience more assiduously, we would be able to develop a more complete science of the psyche and the spirit. Such a science is likely to lead us to empirical perceptions of the action of the divine spirit in these areas of the psyche and the spirit. Surely such a science will also lead us to further understanding of the empirical facts of psychology and biochemistry at play in the experiences of the world of the psyche, the spirit, and the paranormal.

Such a science of the spiritual world has not developed because no energy has been given to a scientific examination of that world. Hence we have no language formulated for handling such empirical, phenomenological, and heuristic investigations of the world of the spirit. No universe of discourse has been developed for discussing it. No categories have been defined for managing the abundant data that seem available for its study. No comprehensive and systematic collection of the data of paranormal human experiences has been undertaken. If such a science were developed, as William James called for a century ago, undoubtedly we would be surprised how much hard data we would have with which to work and what precise categories of evidence we would be able to develop.[4] *We revere faith and scientific progress*, but at the same time *we hunger for miracles*. Van Biema's point is to ask whether those two sides of the human quest are compatible.

The positions taken by Dawkins and Collins constitute the far ends of a continuum of potential notions about the relationship between the truth understood from a secular perspective and the truth understood from a theistic perspective. The late Stephen Jay Gould spent his entire professional life defending his position as a secular scientist, namely, a person who could explain all that is explainable about life and our world, without taking God into account. He spent his career as a famous paleontologist on the faculty of Harvard University and published a number of the most interesting books ever written in the field of science. Toward the end of his life, however, he reassessed the situation of his secular pursuit of knowledge, largely as a result of a running dialogue he had carried out with a close friend, a Jesuit scholar. Gould published his new perspective in a fine little volume titled *Rocks of Ages.*[5]

In this volume, Gould floated the theory that both the conclusions of empirical science and of the science of theology are truth. The value and valence of their truth is equal since all truth, as truth, is equally true. Moreover, he asserted that both can be vindicated, even if they are verifiable in markedly different ways: empirical science by the hermeneutic of suspicion and theological science by the science of rational faith, phenomenology, and heuristic method. Gould made room for these widely differing sets of truth by asserting that the hard sciences and the theological sciences operate in two different worlds, within which each has developed a model of truth. He affirmed the right and truth of each by describing them as existing in *separate, nonoverlapping magisteria.* This was a fascinating and ingenious way of handling the impasse. The difficulty with it was that it left one with a haunting sense that a slight of hand had been performed. Whatever truth we can access, as humans, one would expect that somewhere, somehow, truth is unitary.

QUEST FOR A UNIFIED THEORY

Van Biema tried to push the matter further back to a focal point of unity or integration of all truth, as he teased out the dialogue between Dawkins and Collins. He set the stage with the note that the debate about science versus God has really been double-faceted in the last decade or two. On one hand are the Darwinian suggestions that natural law governs the forces of material development and that natural selection explains the unfolding of life forms. On the other hand has been the question whether the Darwinian theory of evolution can withstand the empirical evidence for ID in the structure and function of the material universe and the rise of life forms. Those who argue for ID offer the scientific challenge that the gaps in the evolutionary story "are more meaningful than its very convincing" total model.[6]

Can creationism and ID stand up against Darwin? Can religion hold its own against the increasingly forceful, sometimes strident, claims and evidence

of science? Van Biema points out that this is an age-old debate, but it is now getting more intense because both sides seem increasingly confident of the apparently incontrovertible evidence they bring to the table. Admittedly, the empirical sciences are becoming more able to

> map, quantify and change the nature of human experience. Brain imaging illustrates—in color—the physical seat of the will and the passions, challenging the religious concept of a soul independent of glands and gristle. Brain chemists track imbalances that could account for the ecstatic states of visionary saints or, some suggest, of Jesus. Like Freudianism before it, the field of evolutionary psychology generates theories of altruism and even of religion that do not include God. Something called the multiverse hypothesis in cosmology speculates that ours may be but one in a cascade of universes, suddenly bettering the odds that life could have cropped up here accidentally, without divine intervention.[7]

Besides Dawkins and Collins, Van Biema cites many other worthy authorities on both sides of the issue. Cardinal Schonborn dismisses the empirical scientists by calling their work scientism and evolutionism, as though it were a sect or a heresy. He argues that they are trying to claim that science is more than a measure and to make it a worldview and touchstone of truth that will replace religion. However, "Dawkins is riding the crest of an atheistic literary wave."[8] Sam Harris's *The End of Faith*[9] sold a half million copies since 2004. He followed it with the also very popular *Letter to a Christian Nation*,[10] attacking theism in general and ID in particular. Tufts University professor Daniel Dennett wrote *Breaking the Spell: Religion as a Natural Phenomenon*,[11] which has also appealed to a large audience of readers.

A summary of Van Biema's narrative of the Dawkins-Collins dialogue describes articulately the history and nature of the current impasse regarding science and God. He cites many of the most interesting sources. Some of the more prominent figures are Victor Stenger, an astrophysicist, who wrote *God, the Failed Hypothesis;*[12] Carl Sagan, whose essays on science and God's absence were posthumously published as *The Varieties of Scientific Experience;*[13] and Lewis Wolpert, who calls himself an "atheist-reductionist-materialist" and who says that "religion is one of those impossible things."[14] Dawkins himself claimed that "if ever there was a slamming of the door in the face of constructive investigation, it is the word miracle. Once you buy into the position of faith, you [begin] losing your scientific credibility."[15] Collins replies, "I would challenge the statement that my scientific instincts are any less rigorous than yours. But my presumption of God and thus the supernatural is not zero, and yours is."[16]

Joan Roughgarden of Stanford is a biologist who has written *Evolution and Christian Faith*, providing a strong defense of the desire of most of us for a model that takes seriously both the theological sciences and the hard

sciences and integrates them into a unified whole.[17] This is the model for which Collins consistently argues. Van Biema notes that "Collins' devotion to genetics is, if possible, greater than Dawkins'. Director of the National Human Genome Research Institute since 1993, Collins headed a multinational 2,400-scientist team that co-mapped the 3 billion biochemical letters of our genetic blueprint. . . . Collins continues to lead his institute in studying the genome and mining it for medical breakthroughs."[18] While Dawkins looks at the scientific data and says there is no evidence for God, Collins looks at the scientific data and says two things: first, God is not limited to time, space, or materiality, so scientific exploration of phenomena of time, space, and materiality is not going to be able to describe much of God; second, there are numerous *loci* in the scientific database that strongly suggest the presence and probability of a transcendental force behind and in the material world.

Ruling God In or Out of the Equation

Collins might have gone further with this line of thought. He might have said, as I think he implies, that because the above is true, a number of other facts cascade from it. First, it would be foolishly unscientific to rule out dogmatically the possibility of God's presence and action behind and within the material universe. If science cannot study God because it is limited to the empirically material, it cannot rule God out. Second, therefore, it is an imperative of authentic science that we take seriously the heuristic and phenomenological data, scientifically available, for the probability of God's presence and action in the material universe. Third, if one posits the assumption of theism, the hypothesis of divine presence and action in this world resolves many of those problems, which, in a secular perspective, prove to be large gaps in the model. Fourth, much more comprehensive data are required to rule God out of the equation than to rule in both the possibility and probability of God. This is particularly true, in view of the intimations and phenomenological evidence we have, from both the normal and paranormal arenas of identifiable human experience, which suggests the operation of a transcendent force and world that impinges on our material domain.

Collins's line of thought and illustrations confirms this specifically. He argues that in our material world, six universal constants make possible the evolution of inorganic and organic existence. If any one of these had been off in the slightest degree, the entire experiment of creation of life as we know it would have been impossible. For example:

> The gravitational constant, if it were off by one part in a hundred million million, then the expansion of the universe after the Big Bang would not have occurred in the fashion that was necessary for life to occur. When you look at the evidence, it is very difficult to adopt the view that this was just

> chance. But if you are willing to consider the possibility of a designer, this becomes a rather plausible explanation for what is otherwise an exceedingly improbably event—namely, our existence.[19]

Of course, Dawkins's response is that with the multimillions or billions of universes, the odds are tolerable that somewhere out there, the conditions for life would have happened just as a result of the random experimentation of matter. What is mysterious in this response is that it assumes an origin of all those universes, without including in the model what the source of matter and energy was in the first place. That is a sizable gap, one would think. Collins's response was that one must posit an infinite number of universes out there that we cannot observe, all experimenting with an infinite number of possible combinations, to strike just the lucky option for life; or one must say there was a plan. He concludes, "I actually find the argument of the existence of a God who did the planning more compelling than the bubbling of all these multiverses. So Occam's razor—Occam says you should choose the explanation that is most simple and straightforward—leads me more to believe in God than in the multiverse, which seems quite a stretch of the imagination."[20]

Dawkins wished to claim that a God hypothesis impedes science and that faith is the opposite of and obstructs reason. Collins correctly clarifies that both of those propositions are egregious claims and specious untruths. Faith and reason are handmaidens of each other. Moreover, modern science and the enlightenment were launched mainly by men and women who were both towering religious figures and heroic scientists. The community of scientists is still, in the majority, made up of persons of faith. Dawkins tended to think of religious perspectives mainly in terms of an exaggerated notion based on extremely literalist fundamentalist Christians. That assumption or claim is, of course, naive, uninformed, and prejudicial to the discussion. Obviously, he does not know much about the general communities of healthy and reasonable believers.

In the end, the Dawkins-Collins dialogue led the former to declare, "My mind is not closed. . . . My mind is open to the most wonderful range of future possibilities, which I cannot even dream about. . . . When we started out and we were talking about the origins of the universe and the physical constants, I provided . . . cogent arguments against a supernatural intelligent designer. But it does seem to me to be a worthy idea . . . grand and . . . worthy of respect. . . . If there is a God, it's going to be a whole lot bigger and a whole lot more incomprehensible than anything that any theologian of any religion has ever proposed."[21] Who would not say amen to that central truth?

Collins observed that after a quarter century of scientific work, he agreed with everything Dawkins said about the field of science but states that

"there are answers science isn't able to provide about the natural world—the questions about why instead of the questions about how. I'm interested in the whys. I find many of those answers in the spiritual realm. That in no way compromises my ability to think rigorously as a scientist."[22] It is the questions of the hows and whys that we are interested in as we prepare this volume on *Miracles: God, Science, and Psychology in the Paranormal—Medical and Therapeutic Events.*

WHERE GOD AND SCIENCE MEET

In 2006 a remarkable set of three volumes, titled *Where God and Science Meet: How Brain and Evolutionary Studies Alter Our Understanding of Religion,* was published in the Praeger series Psychology, Religion, and Spirituality.[23] It was ably edited by Patrick McNamara, one of the contributors to the first volume of the present work. The titles of his three volumes indicate their relevance to this chapter. They are, in sequence, *Evolution, Genes, and the Religious Brain; The Neurology of Religious Experience;* and *The Psychology of Religious Experience.* It is self-evident that the underlying assumption in the scientific work of McNamara's three volumes is the pervasive relevance of the interface and integration of research in religion, neurology, and biochemistry.

McNamara's first volume reports at length the way in which genetics and environment affect our sense of values, authority, rigidity, and religiosity. It demonstrates the empirical evidence for the relationship between affective neuroscience and sacred emotions as well as the data for and against theories and models of religiosity as an evolutionary adaptive mechanism. One chapter articulates the relationship between religion, the evolution of the human mind, and the unique functions of the human brain. His second volume addresses a wide range of issues in neurochemistry and neuroelectronics, as they relate to religious experience and spiritual practices. These data are illustrated by some surprising empirical insights from parkinsonism studies and epilepsy. A remarkable chapter describes in surprising detail the interaction of the neurocognitions of meaning making, religious conversion, and spiritual transformation. The consistent conclusions of the various aspects of this volume indicate the scientific evidence for the intricate interface in humans of the brain, mind, biochemistry, electrical system, and religious experience.

Volume three, as one would guess from the title, deals with mind, brain, meaning making, psychodynamics, neuropharmacology, spirituality, mysticism, and religious practices. The chapter themes vary from the study of entheogens, daydreaming, and religion and intolerance to what we can learn from serious psychopathology about science and religion and the cross-cultural consistency of their useful connection. Forty noted scholarly

scientists joined McNamara in producing these erudite volumes, analytically assessing the interface of the hard sciences and the psychosocial sciences in our understanding of the relationship of science and religion. The phenomenal amount of vital new science generated in and by McNamara's three volumes gives the lie to the notion that religion and science cannot meet. The truth is that they cannot get on with their own business, except in their necessarily cooperative mutual quest for the whole truth in all its facets. They need each other if they care to be authentically comprehensive in the pursuit of their respective disciplines.

Exploring the Limits

Similar exploration of the frontiers of the brain sciences and religion was undertaken in 2003 by five scientific researchers, including Richard Dawkins. The God Experiments were reported, by John Horgan, in *Discover: Science, Technology, and the Future*.[24] The God Experiments, briefly described, were laboratory analyses by means of electronic machines for measuring brain activity, which endeavored to stimulate and measure specific areas of the brain that the experimental scientists who designed the process believed were the areas which incited religious experience. The experiments were launched on the assumption that religious experiences were generated by natural processes of brain stimulation resulting from environmental influences such as ingesting specific chemicals in food or drink or being exposed to environmental conditions that incited such experiences. The scientists assumed that inducing apparent religious experiences by specific brain stimulation would rule out any notion of God or the divine spirit causing the religious experiences reported by numerous humans throughout history. Dawkins offered to be the experimental subject for Michael Persinger's empirical attempt to induce "religious experiences in subjects by stimulating specific regions of their brains with electromagnetic pulses."[25] Dawkins said he was very disappointed that he did not experience any transcendental experiences like "communing with the universe or some other spiritual sensation."[26] He said he had always been curious to explore mystical experiences from the inside, so to speak. Horgan reports,

> Many researchers, like Persinger, view the brain as the key to understanding religion. Others focus on psychological, genetic, and biochemical origins. The science of religion has historical precedents, with Sigmund Freud and William James addressing the topic early in the last century. Now modern researchers are applying brain scans, genetic probes, and other potent instruments as they attempt to locate the physiological causes of religious experience, characterize its effects, perhaps replicate it, and perhaps even begin to explain its abiding influence.[27]

Horgan declares that religion is the most complex indication of the most complex subject of human exploration: the human mind. He notes that scientists study religious experience for a wide variety of motives and assumptions, stating, "Some of them hope their studies will inform and enrich faith."[28] Some are embarrassed by religion as a relic of our past and want to be rid of it. I would like to summarize Horgan's article in terms of how it relates to one theme: is religion a matter of ritual behaviors or of beliefs? "Is it best studied as a set of experiences, such as the inchoate feelings of connection to the rest of nature that can occur during prayer or meditation?"[29]

Horgan reports a number of analytic experiments in the relationship between religion and science. In *Faces in the Clouds*, the Fordham anthropologist Stewart Guthrie, with the back of his hand, dispenses religion to the ash heap of human fantasy.[30] Humans are inclined, he thinks, to project human qualities on the universe, and so we create the illusion of gods out there. The absurdity of this enterprise, he claims, is evident in the multiplicity and multiformity of the gods humans have projected over time, all of which represent a systematic religious anthropomorphism. This inclination to anthropomorphic projection is an adaptive evolutionary trait, Guthrie is certain, and while it is an illusion, it nonetheless assisted primitive humans to survive the trauma of life and loss and the fear of the unknown of time and eternity. He concludes,

> Over millennia, as natural selection bolstered our unconscious anthropomorphic tendencies, they reached beyond specific objects and events to encompass all of nature . . . until we persuaded ourselves that "the entire world of our experience is merely a show staged by some master dramatist."[31]

Guthrie humorfully cites Darwin to the effect that this adaptive trait is not limited to humans but is also true of other higher mammals. Apparently, a dog can imagine that a natural object is animated by spirits since Darwin's dog growled at a parasol lifted off the ground by a slight breeze. I find claims like those of Guthrie, in this case, and Darwin, in his psychoanalysis of his dog, to be immensely humorful and quite absurd. This is not because I think their challenge of theism is misplaced, but because their argumentation is so naive and trivial. Obviously, Guthrie is projecting on religion and on human spiritual experience a model that most theists would not recognize as their view of God or spirituality. He seems to have some trivial memory of a bad Sunday school lesson, to which he paid little attention in the first place. He thinks that is spirituality or true religion.

Apparently Guthrie is enormously ignorant of the mainstream of healthy spirituality on the part of massive communities of us who are more prepared to explore honestly the human quest of and encounter with the paranormal

and the divine in our experience than we are prepared to superficially write off that facet of demonstrable human realty. Moreover, apparently, Guthrie has never developed a model for conceptualizing this facet of his own personal nature and experience so as to be able to note, recognize, name, and remember his own spiritual experiences. One does need to have the eyes to see and the ears to hear, or no reality can impose on us firmly enough to register as reality. That is true in any field and of any facet of our growth, development, and scientific exploration. Major scientific breakthroughs, for example, usually impress the scientists who make the surprising discoveries as having been amply evident right there before their noses all along. It just required a certain new perspective to grasp what was right there in front of their faces.

As regards Darwin's assessment of his dog's growl, it would be interesting if he would explain to us more clearly what he thinks that dog was thinking and why he thinks that. I notice that dogs are smart. I watch my golden retriever observe a squirrel and then think over whether, at her age, chasing the squirrel is worth the trouble. Lately, she usually decides to live and let live, and lies down instead by our warm hearth. She is 13.5 years old, the human equivalent, they tell me, of about 100 years. Considering how I feel at three fourths that age, I can readily understand her decision to leave that squirrel alone. So it seems clear that higher mammals have some reflective and decision-making ability that goes far beyond mere instinctual reaction. However, how Darwin can determine that his dog has a *spiritual* response or religious *ritual* reaction to the mysteriously moving umbrella is beyond my comprehension. Fear of the unknown, or of the unimaginable or unusual, is not inherently and inevitably a religious dynamic or a spiritual function of the human or canine creature.

A somewhat different approach to human experiences of spirituality, religion, mysticism, and the paranormal is evident in the excellent work of Andrew Newberg, a neuroscientist from the University of Pennsylvania. Horgan treats Newberg's perspective extensively in the God Experiments. Newberg notes that people from almost all religious traditions report very similar mystical and paranormal experiences, suggesting to him that a common neural pathway is active in the human brain and psyche in all these cases of spiritual perception. Such brain activity has been scanned by positron emission tomography for decades. Newberg goes a step further, employing single-photon emission-computed tomography technology.[32]

He has discerned that in deep meditation or contemplation, the posterior superior parietal lobe of the brain, which orients us in time and space, markedly decreases its neural activity. Persons with damage in that part of the brain have difficulty sensing where they are and at what point their bodies end and the rest of the material world begins. The decrease in neural activity in the posterior superior parietal lobe during meditation increases a

person's sense of unity with the rest of the material universe, diminishing one's sense of the boundaries between the self and the external world. One of Newberg's subjects described her meditation experience as "dissolving into Christ-consciousness."[33] Horgan's report on Newberg continues:

> Intriguingly, Newberg has found some overlap between the neural activity of self-transcendence and of sexual pleasure. . . . Just as orgasms are triggered by a rhythmic activity, so religious experiences can be induced by dancing, chanting, or repeating a mantra. And both orgasms and religious experiences produce sensations of bliss, self-transcendence, and unity; that may be why mystics such as Saint Teresa so often employed romantic and even sexual language to describe their raptures.
>
> The overlap between rapture and orgasm isn't total. The hypothalamus, which regulates both arousal and quiescence, seems to play a larger role in orgasms, while the brain's frontal lobes, the seat of higher cognitive functions, are apparently more active during spiritual practices. Nevertheless, Newberg concludes, an "evolutionary perspective suggests that the neurobiology of mystical experience arose, at least in part, from the mechanism of the sexual response."[34]

Newberg may be making a larger leap of illogic than necessary in suggesting that mystical neurobiology arose from sexual response, but surely he is correct in demonstrating that they are related and, in many crucial ways, similar. Humans have been aware of this at some intuitive level, of course, for a long time. It has long been the case that only in sexuality and spirituality does the use of the language sequence we apply to both make sense: contact, communication, connection, communion, union, arousal, ecstasy, and eternity or transcendence. The crescendo is not accidental, but rather primal and comprehensively descriptive of both sexual play and spiritual practice.

It is probably the case that the life force at the center of the human self is the driver of both sexuality and spirituality, the two being different languages or universes of discourse for that central force when it reaches out for union with another human and when it reaches out for the transcendent or for God. Horgan notes that electroencephalography and magnetic resonance imaging indicate that the neurobiology of both sexuality and spirituality are just as Newberg suggests, though considerably more complex than his technology was able to indicate.

As implied earlier, Persinger explains religious experience as pathology. He contends that the independent functions of the right and left hemisphere of our brains are responsible for many mystical experiences. Our sense of self is maintained in our left hemisphere, and *it* may sense the notions of self resident in our right brain hemisphere as *another self.* This would explain experiences of a *sensed self* within our purview. "Depending upon our circumstances and background, we may perceive a sensed presence as a ghost,

angel, demon, extraterrestrial, or God. Religion (or at least the experience of God), Persinger's research suggests, might be a cerebral mistake."[35] Persinger holds that his testing results confirm the work of Wilder Penfield in the 1950s.[36]

The God Gene

Horgan next presents the work of Dean Hamer, director of genetic research at the National Cancer Institute. Hamer's research is directed toward identifying a gene that makes religious behavior and spiritual experience meaningful for humans. Hamer defines intrinsic religiousness as the desire to pray often and to feel the presence of God. He focuses on monoamines and chemical neurotransmitters, and identifies an allele (variant) of the gene, vesicular monoamine transporter (VMAT), that corresponds to higher scores for what he has defined as spirituality. Francis Collins says that Hamer's claims for the VMAT variant are exaggerated.

Horgan then observes that "Rick Strassman has proposed a theory even more reductionist and far-fetched than Hamer's, yet one that has empirical support."[37] Strassman is a psychiatrist, and in his book *The Spirit Molecule*, he claims that spirituality is prompted by dimethyltryptamine.[38] This single chemical, according to Strassman, is naturally generated by our brains and "plays a profound role in human consciousness," triggering "mystical visions, psychotic hallucinations, alien-abduction experiences, near-death experiences, and other exotic cognitive phenomena."[39]

In authorized human-subject research with volunteers at the University of New Mexico, Strassman administered this psychedelic chemical. His report on subject experience included the following: "Many . . . subjects reported quasi-religious sensations of bliss, ineffability, timelessness, and reconciliation of opposites; a certainty that consciousness continues after death of the body; and contact with 'a supremely powerful, wise, and loving presence.'"[40] However, his results were not uniformly positive for the subjects, and so he discontinued that research. This type of research is very interesting but has two limitations: first, it is not possible to certify that the positive experiences of the test subjects is the same phenomenon as that experienced in nonchemically induced experiences of a religious, spiritual, or paranormal nature; second, however we are to understand or interpret all this research, the data do not definitively rule God in or out of the scientific equation or of the equation of human experience. A broader range of data, a better model of critical categories, and a sensible universe of discourse for this kind of paranormal human experience are required to construct a science of the spiritual or paranormal world of human events.

Horgan concludes sensibly by acknowledging that neither the exact sciences nor the social sciences, in their present state, can assure us whether God exists out there objectively in a transcendent sphere beyond the boundaries

of time, space, and materiality, or only in our perceptions of what our paranormal experiences mean. As my grandmother lay dying, she joked with the family about many things, including her husband, whom she affectionately called "Pa" and who had preceded her in death. In the middle of a sentence, she suddenly looked up toward the corner of the room, stopped talking, and then, with an enormous expression of delight on her face, reached out her hand and said, "Oh, Pa!" Then she was gone. Was that the mystical imagination of a dying brain, or did she know what she saw and what she meant? Sometimes a cigar really is a cigar!

To put it in Horgan's closing words:

> Why do some scientists continue the search for the roots of religious experience? Shouldn't such claims of oneness with God be judged by their fruits, rather than their roots, as William James wrote in *The Varieties of Religious Experience?* Researchers may persist at these efforts because such studies offer the potential to alter our lives. In principle, these findings could lead to methods—call them "mystical technologies"—that reliably induce the state of spiritual insight that Christians call grace and Buddhists, enlightenment . . . Suppose scientists found a way to give us permanent, blissful, mystical self-transcendence. Would we want that power?[41]

Of course we would, if it gave us the psychospiritual skills to heal our bodies of dreadful diseases or relieve suffering and prolong life. As I write this, my friend is dying at age 68. Cancer is killing him. He has successfully fought it, leukemia and pancreatic cancer, for 25 years, but now it is finally taking him down. He is getting very thin. The cancer is eating his nutrition intake faster than his body can get to it. He will die today or tomorrow. I would welcome the power around the edges of which the scientists are working, if I could go into that hospital room this afternoon and provide Charlie the power to win this long fight after all.

John Matzke played football for Dartmouth. He got malignant melanoma in a lump in his armpit at age 30. They said he had 18 months to live. Ten years later, it had spread to his lung. They said the inevitable outcome was death within months. John took a month off, decided to delay standard treatment, and began long walks in the mountains. He improved his diet and began to meditate. In his meditation, John visualized himself healthy, with good, strong blood cells destroying the cancer.

After his month off, he returned to the Veterans Administration Hospital for further evaluation regarding a treatment regimen. Dr. "O'Donnell repeated the chest X rays to document the size and location of the tumor before starting treatment. But instead of the large cancerous lesion in Matzke's lung, he saw . . . nothing. O'Donnell recalls, 'When John came back a month later, it was remarkable—the tumor on his chest X-ray was gone. Gone, gone, gone.' . . . Doctors would like to understand cases like Matzke's."[42] So would we all.

Such cures intrigue us all, physicians, research scientists, patients, and friends of the suffering. This volume is about pressing on in that quest for an understanding of new psychospiritual ways we can improve the medical and therapeutic events that so dominate our tragic human adventure. We want and need to understand what is really going on in those moments when we experience miracles, when God, science, and psychology combine in the paranormal and all the rules seem, for a blessed moment, to be redemptively changed. This work is for that end.

NOTES

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2. David Van Biema (2006), God vs. Science, *Time*, November 13, 48–55.

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6. Van Biema (2006), God vs. Science, 49.

7. Ibid., 50.

8. Ibid.

9. Sam Harris (2004), *The End of Faith: Religion, Terror, and the Future of Reason*, New York: W.W. Norton.

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14. Van Biema (2006), God vs. Science, 50.
15. Ibid., 52.
16. Ibid., 53.
17. Joan Roughgarden (2006), *Evolution and Christian Faith: Reflections of an Evolutionary Biologist*, Los Angeles: Island Press.
18. Van Biema (2006), God vs. Science, 51.
19. Ibid, 52.
20. Ibid., 53.
21. Ibid., 55.
22. Ibid.
23. Patrick McNamara, ed. (2006), *Where God and Science Meet: How Brain and Evolutionary Studies Alter Our Understanding of Religion*, 3 vols., Westport, CT: Praeger.
24. John Horgan (2006, December), The God Experiments: Five Researchers Take Science Where It's Never Gone Before, *Discover: Science, Technology, and the Future*, 52–7.
25. Ibid., 52.
26. Horgan, God Experiments, 52.
27. Ibid.
28. Ibid.
29. Ibid., 54.
30. Stewart Guthrie (1995), *Faces in the Clouds: A New Theory of Religion*, New York: Oxford University Press.
31. Horgan, God Experiments, 54.
32. Ibid.
33. Horgan, God Experiments, 54.
34. Ibid.
35. Ibid., 55.
36. See, for example, Wilder Penfield (1952), Memory Mechanisms, *American Medical Association Archives of Neurology and Psychiatry*, 67, 178–98. See also Thomas A. Harris (1969), *I'm OK—You're OK*, NewYork: Avon Books, 21–37.
37. Ibid., 56.
38. Rick Strassman (2000), *The Spirit Molecule: A Doctor's Revolutionary Research into the Biology of Near-Death and Mystical Experiences*, New York: Park Street Press.
39. Ibid., 56.
40. Ibid., 57.
41. Horgan, God Experiments, 57.
42. Jeanne Lenzer (2007, September), Citizen, Heal Thyself, *Discover: Science, Technology, and the Future*, 56.

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CHAPTER 2

The Enduring Fascination of Miracles

Ilkka Pyysiäinen

On June 28, 2005, someone pointed out to the partially blind Catholic Julio "Sly" Dones that a plaster statue of Jesus he had found in a dumpster in Hoboken, New Jersey, had miraculously opened its eyes. Soon the media was flooded with stories about the statue blinking its right eye, turning its head, and streaming tears (Arne 2005; Schapiro 2005; Associated Press 2005). The natural explanation is that the statue had embedded blue eyes made of glass and that the eyelids of the right eye had been partially broken off (Nickell 2006). Yet it was the news about a miracle that became widespread, not the natural explanation. This is true of nearly all reports of supposedly miraculous events. They have an enormous power to spread among people, while natural explanations of the same events are for the most part ignored or actively contested. What makes miracles so attention grabbing?

MIRACLES AND FOLK INTUITIONS

It is usually thought that miracles are events that take place against the laws of nature, with *laws of nature* here understood in a scientific sense. Theologian Calvin Miller, for example, writes (2003, 25), "But a single praying passenger may abrogate the force of physics and chemistry and order the world back to honoring God's interruption of natural law." Such a view cannot help us explain how and why persons identify certain events as miraculous. People classify certain types of events as miraculous quite irrespective of whether they know anything about natural laws. There were miracles in this sense long before there was science (see Pyysiäinen 2002, 2004b).

Thus, when we wish to explain human thinking and behavior, we must conceptualize miracles in such a way that contrasts them with our everyday expectations, not with science. Only then can we try to explain why certain types of events are regarded as miraculous. Miracles are phenomena that violate our intuitive expectations about such basic categories as solid objects, living things, and personal agents (Pyysiäinen 2002). The ways we think about objects that fall in these categories has been intensively studied in recent cognitive and developmental psychology and cognitive science (e.g., Atran 1987, 1990; Rosengren, Johnson, and Harris 2000; Bloom 2005; Geary 2005).

Let me first explain what I mean by categories (Bloom 2005, 39–63). *Categorization* means that we group concepts and ideas into classes. All apples, for example, belong to the class or category of *apples*. Every individual apple is not a totally unique entity because an individual apple shares many features with other apples. It is one instance of the general category of apples. Once we realize that an entity is an apple, we know many things about it just because we have accumulated knowledge of the category of apples. In this way, membership in a category always helps us understand what a given entity is like. We need not evaluate time and again whether *this particular* apple is edible, what it tastes like, and so forth. Once we know that it is an apple, we know many other things about it as well.

We have many kinds of intuitive expectations about the behavior of various types of entities because we have implicit knowledge of basic ontological categories. We automatically infer many things on the basis of membership in a specific category (Boyer 1994). Categories form hierarchies in the sense that apples, for example, is a subcategory of the higher-order category of fruit. The classical biological taxonomy consists of the hierarchy of species, genus, family, order, class, phylum (division), and kingdom. More recent, so-called cladistic taxonomies differ somewhat from this classical model, but the basic principle of categorization is the same (see Christoffersen 1995; Härlin and Sundberg 1998). An organism always belongs to only one species, genus, and so on. We humans, for instance, belong to the species *sapiens*, genus *Homo*, family Hominids, order Primates, class Mammals, phylum Vertebrates, and kingdom Animals. There are also similar folk-biological taxonomies composed of essence-based, species-like groups and the ranking of species into lower-order and higher-order groups, with humans everywhere thinking about plants and animals in similar, highly structured ways (Atran 1987, 1990, 1998).

Such basic categories as solid objects, living things, and personal agents appear so early in the cognitive development of the infant that they seem to be genetically encoded (Keil 1979, 1989; Boyer 1994, 2001; Geary 2005). Pascal Boyer, citing Frank Keil, thinks that we have an intuitive ontology consisting of such categories as abstract object, living thing, animal, event,

and so on (Boyer, 1994, 101). We intuitively, spontaneously, and automatically categorize entities in these categories and apply folk-mechanical, -biological, and -psychological explanations as relevant in each category (Boyer 1994, 2001).

Intuitive ontology served us well as long as our species was not able to explore and manipulate the environment using advanced technology. Evolution shaped our minds to process things that were important for our ancestors to perceive to survive and reproduce. Our ancestors did not care about atoms or galaxies. Therefore new advances in technology, such as cameras, firearms, or the telegraph, appeared as miraculous to those who saw them for the first time. These inventions violated the intuitive expectations that characterize folk mechanics. Only new, accumulated experience and reflective thinking can help persons to become routinized in dealing with phenomena for the understanding of which we do not have a spontaneous capacity (Wolpert 1992; Keil and Wilson 2000).

This may never have been possible without new cognitive development that made our ancestors capable of detaching ideas from their immediate reference to the perceived world (see Cosmides and Tooby 2000; Geary 2005). This decoupling made it possible to think about absent conspecifics as though they were present, to lie, create art and fiction, and also form superstitious and religious ideas. In this perspective, miracles are phenomena that violate our intuitive expectations related to basic ontological categories (Pyysiäinen 2002). Boyer (1994) calls concepts involving such violations *counterintuitive*. *Counterintuitiveness* does not mean the same as "funny" or "not true"; it simply refers to the fact that a concept or mental representation contradicts human intuitive expectations about basic ontological categories.

Minimally counterintuitive representations contain only one violation of expectations (Barrett 2000, 2004; Boyer 2001; Atran 2002; Atran and Norenzayan 2004). There is evidence that such representations are better recalled than intuitive or maximally counterintuitive ones and that they might therefore be widespread in and across cultures (Barrett and Nyhof 2001; Boyer and Ramble 2001). The context in which counterintuitive concepts appear seems to be important, however. When subjects are presented mere lists of concepts, without a narrative context, they recall *intuitive* representations better than minimally counterintuitive ones. Minimally counterintuitive representations are better recalled only when the narrative context creates an expectation for counterintuitive concepts, which persons thus may actually interpret to be intuitive. As different types of discourses activate different kinds of background knowledge, persons can, for instance, expect the attack of aliens in a science fiction movie but not in the radio news (Norenzayan and Atran 2004; Upal 2005; Gonce et al. 2006; Upal et al. 2007; Tweney et al. 2006).

Yet treating a counterintuitive representation as though it were intuitive does not mean the breakdown of intuitive ontology altogether. Becoming routinized in using the concept of a bodiless mind (gods, spirits, angels) in one context does not override the general expectation that minds are embodied. Therefore the religious beliefs in traditions other than one's own have often been considered to be superstitions (Martin 2004). Although miracles are events that, in principle, contradict intuitive expectations about basic ontological categories, it is possible to become routinized in regarding *some* such events as natural in the sense that they are something to be expected, although they cannot be predicted. If, for example, praying seems to heal a sick person, this is something a believer might expect, although she cannot foresee or predict in which cases it will be that God decides to heal a sick person because of the prayers of others.

Two things are important here. First, becoming routinized in expecting miracles to happen does not reduce the salience of miracles and make them purely ordinary events. On the contrary, supposed miracles are attention grabbing and memorable events because they are unpredictable, often relate to important things in life, and thus trigger highly emotional responses (see Pyysiäinen 2001, 97–139). Second, believing that God can work miracles does not mean that one has an explanation of the mechanism through which God acts. It is precisely for this reason that supposed miracles are unpredictable. As soon as one can point out a mechanism that produces a supposedly miraculous outcome, the miracle ceases to be a miracle, just as has happened in the case of firearms and cameras.

This means that it might be advisable to reserve the word *miracle* for counterintuitive events that violate intuitive expectations *and* have no scientific, mechanistic explanation. Moreover, miracles in the strong sense of the word are typically attributed to some supernatural agent; mere unexplained events are miracles only in the weak sense of the word (Pyysiäinen 2002).

It is possible, in principle, to violate intuitive expectations either by transferring agency to an artifact or to a natural object or by stripping an agent from a biological body (Boyer 1994). Similarly, the ontological boundary between mere things and living kinds can be transgressed in both ways, making stones alive or plants and animals mere dead matter. Transference of agentive properties gives us such representations as bleeding effigies and statues that hear prayers (see Nickell 1993, 19–100), while the denial of a biological body to an agent results in representations such as spirits or gods. It seems that most miracle beliefs are constructed by transferring agentive properties to a thing or a living kind or by transferring biological properties to a thing (see Thompson 1934, 4–200). This is reflected in, for example, the miracles Jesus is reported to have performed.

FOLK BELIEFS AND THEOLOGY

The following are among the miracles attributed to Jesus in the Epistles:

1. Matthew 17:27 (*New International Version* [NIV]): Jesus predicts that the first fish the disciples catch will have a four-drachma coin in its mouth.
2. Mark 8:22–26: Jesus heals a blind man by rubbing spit in his eyes.
3. John 11:43–44: Jesus wakes up the dead Lazarus.
4. Matthew 8:23–27; Mark 4:35–41; Luke 8:22–25: Jesus rebukes the winds and the waves, and the sea becomes completely calm.
5. Matthew 14:25; Mark 6:48; John 6:19: Jesus walks on the lake.
6. Matthew 21:19; Mark 11:14: Jesus commands the fig tree never to bear fruit again.
7. Mark 16:19: Jesus is taken up into heaven.
8. John 20:19: Dead Jesus appears to his disciples through locked doors.

These miracles fit well in Stith Thompson's scheme for classifying marvels in his *Motif-Index of Folk-Literature* (1934, 4–200). Thompson's following seven main categories are derived from literate sources documenting folk beliefs:

1. otherworldly journeys
2. marvelous creatures
3. spirits and demons
4. remarkable persons
5. persons with extraordinary powers
6. extraordinary places and things
7. extraordinary occurrences

The eight biblical miracles listed previously correspond to the following eight subtypes in Thompson's seven categories, respectively:

1. extraordinary swallowings (F910–23)
2. marvelous cures (F950–56)
3. extraordinary occurrences concerning seas or waters (F930–33)
4. extraordinary occurrences concerning seas or waters (F930–33); compare other marvelous powers (marvelous runners F681–81.5)
5. extraordinary trees, plants, fruit, etc. (F810–17)
6. journey to heaven (F11–17)
7. phantoms (F585)

Biblical narratives are naturally in the background of many folktales in Christian cultures (e.g., Loomis 1948); conversely, also, the biblical motifs have been influenced by the folk traditions of their time. Folk narratives come in various genres; not all beliefs are the object of serious belief. Types of folk narratives have been classified by sorting them according to the

criteria of factual versus fabulous and secular versus sacred (e.g., Littleton 1965). Myths, for example, are "extremely sacred and patently fabulous," (Littleton 1965) while history is both factual and secular. Folktales *(Märchen)*, for their part, are fabulous but secular, while sacred histories are sacred but factual. Legends, or sagas, are in the middle of both continua (Littleton 1965; see Pyysiäinen 2001, 223–25).

Whether persons actually believe in a specific miracle thus is not a simple yes or no question. Doubt is not part of intuitive judgment in everyday life (Kahneman 2003), and obvious facts are not regarded as objects of belief. Our everyday certainties are held true only in the implicit sense that we make inferences on their basis, not in the sense that we would consciously think that we have such and such beliefs (see Pyysiäinen forthcoming). We do not usually decide whether a given belief is true before we start to employ it as a premise in reasoning (see Boyer 2001, 298–306). Persons do not believe in miracles because they somehow relax their otherwise strict criteria for evidence; rather, they relax these criteria because some counterintuitive claims about miracles have become plausible to them (Boyer 2001).

Theology, in contrast to everyday religion, is based on reflective thinking and a philosophical analysis and elaboration of the motifs in folk traditions (Wiebe 1991; Boyer 2001; Pyysiäinen 2004a). A theological view of miracles thus is more sophisticated (e.g., Brown 1984; Swinburne 1989). There is, however, experimental evidence to the effect that persons have difficulties in using theologically correct concepts in everyday reasoning (Barret and Keil 1996; Barrett 1998). Theology thus mostly lives in reflective contexts and in a book–mind interaction, being transferred to everyday contexts only with great difficulty, if at all (Boyer 2001; Pyysiäinen 2004a). Thus theological beliefs are not easily distributed in populations.

In folklore studies, it has been a matter of dispute whether given narrative motifs become widespread because of the psychic unity of humankind or because of cultural contacts and borrowing. The first alternative was represented by ethnologist Adolf Bastian (1826–1905), while the second one was made popular by geographer Friedrich Ratzel (1844–1904; see Koepping 1983). One formulation of the contact hypothesis was the so-called Finnish method of the folklore scholars Julius (1835–1888) and Kaarle Krohn (1863–1933; Krohn 1971).

The cognitive perspective here endorsed is a weak version of the psychic unity thesis. Although there may be no truly universal contents, there are cross-culturally recurrent patterns in beliefs and narratives about miracles. This is because the intuitive ontologies are valid cross culturally. Whether due to the cognitive evolution of our species or to learning, they bring along intuitive expectations, the violation of which makes certain beliefs attention grabbing and memorable. The beliefs are contagious and thus widespread because they are easy to adopt and to remember.

Mere memory effects are not enough to explain the natural appeal of miracles, however. Belief and disbelief are strongly emotional attitudes (Pyysiäinen 2001, 77–139; Thagard 2005); beliefs about miracles are also used for various purposes, serving oppression and liberation alike. Alleged power to perform miracles can also be used as proof of authority and that the performer has some special capacities. This involves the paradox that as soon as miracles become routine, they lose the aura of magic and can no longer be used as signs of special power and authority. Miracles are attention grabbing precisely because they are exceptional.

This might explain the fact that in religious traditions, miracles are often reported to have happened, although actively seeking them is strongly discouraged. Matthew (12:38–39, NIV), for example, relates Jesus to have replied to the Pharisees who wanted to see a miraculous sign, "A wicked and adulterous generation asks for a miraculous sign! But none will be given it except the sign of the prophet Jonah." Likewise, the monastic rules of Buddhist monks (the third Parajika Pārā rule) include the prohibition to vaunt one's spiritual accomplishments (Vinayapitakam; see Sharf 1995, 236).

This tension between interest in and suspicion toward miracles manifests at least partly the tension between persons' actual beliefs and theologically correct beliefs. Yet certain skepticism towards miracles is found also in folk religion. Pascal Boyer (2001, 76) provides the following example from his fieldwork among the Fang of Cameroon. When someone had insisted that he had seen a shaman stick a finger in the ground, with the consequence that it reemerged in another village, others said that he could not have seen this because he could not have been in two places at once. The man then confessed that he had only seen the shaman stick the finger in the ground; he had only heard about the reemerging of the finger from a very reliable source. After this confession, he then walked off in a sulk.

It seems that disputes like this can only arise with regard to counterintuitive claims or when there is insufficient information about intuitive claims. In the case of counterintuitive claims, our information is, in principle, never sufficient. Whereas a dispute about the number of cars in the parking lot, for example, can be settled by counting the cars, a disagreement over an alleged miracle cannot be settled by a similar gathering of new information. Miracles are considered to be exceptional phenomena, and thus no generalized information can help decide whether a miracle has happened. Even if no one has ever seen a finger stuck in the ground reemerge in another village, maybe such a thing did happen on *one* specific occasion? This line of reasoning typifies folk psychology. If a miracle cannot be conclusively disproved, this is then regarded as proof of its factuality (see Esptein et al. 1992; Denes-Raj and Epstein 1994).

Scientists, however, know that you cannot prove the negative and that this is not any kind of proof of existence. One cannot prove that Santa Claus does

not exist, but this is *not* proof for the existence of Santa Claus. There are often good reasons for a scientist not to believe a given claim, although it cannot be directly shown to be false (see Pyysiäinen 2004b, 85–87). Everyday thinking works differently, for better or worse. Our disposition toward emotional coherence (Thagard 2005) often makes claims about miracles plausible, or at least attention grabbing, to us. In times of various kinds of crisis, miracles may then serve as a means of retaining a positive outlook on life and survival.

Shared belief in the incredible can also be a costly and hard-to-fake signal of commitment to a group and its values and beliefs (see Atran 2002, 133–40, 264–69). For example, those who publicly express their belief in the claim that a virgin gave birth to a child take the risk of being ridiculed by outsiders, while gaining the benefits of a good reputation among insiders. A believer in miracles is somebody who can be trusted because he or she obviously has invested time and resources in shared religion. In this way, beliefs about miracles spread in populations because they are cognitively salient, are linked with positive emotions, and can serve as a sort of secret handshake, by which believers recognize their fellow believers. Cognitive structures, such as intuitive ontology, canalize the cultural transmission of miracle beliefs, which may then become an integral part of everyday thinking.

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CHAPTER 3

Relocating, Reanalyzing, and Redefining Miracles: A Psychodynamic Exploration of the Miraculous

Daniel J. Gaztambide

> Miracles . . . are events which have a particular significance *to* the person who experiences them. That is the one fundamental statement. Miracles are subjective-objective, subject-object-oriented, always in correlation, and never comprehensible in any other way. Not merely subjective, they are not merely objective, either.
>
> —*Paul Tillich (1963, 111)*

What is the meaning of the term *miracle*, and what does a psychology of miracles look like? Is a miracle an objective or subjective reality, and how can we analyze it? Psychologically speaking, miracles can only be understood within the life context of individual persons. They are the experience of the divine intervening in one's life for the purpose of allaying anxiety and restoring security to a self, in such a manner that the very self and its patterns of relating may be transformed in the process. I wish to analyze miracles from a phenomenological and psychodynamic perspective and define miracles as experiences of meaning making.

HUME'S PARADIGM OF MIRACLES

In *An Inquiry Concerning Human Understanding*, Hume (1777, sec. 10.1.90) defines a miracle as a violation of the laws of nature. A wise person, he argues, shapes his or her belief in accordance with the available evidence of personal experience. A miracle, defined as a violation of natural law for Hume, is a violation of everyday human experience. If one's everyday experience, which establishes the epistemic basis for our belief in natural law, militates against

miracles, Hume (1777, sec. 10.1.90) advises us to tread the path of wisdom and reject such singular events in disbelief: "The proof against a miracle . . . is as entire as any argument from experience can possibly be imagined." Miracles, thus, are events without any strong evidence for us to believe in them. Only the unlearned and unwise would believe in such things, which, according to Hume (1777, sec. 10.2.94), "are observed chiefly to abound among ignorant and barbarous nations."

Under Hume's influence, an image of miracles arose and is rather popular in both contemporary mainstream and academic parlance: miracles are violations of natural laws, impossible events, events without evidence, and events that a rational person would not believe in.[1] What would a psychology of miracles look like when informed by Hume's perspective? Since his argument rests on experience that leads to an *a priori* denial of the possibility of miracles, what is psychologically wrong with those who believe in them? Hume (1777) argues that people who are sufficiently wise as not to be deluded, whose integrity places them beyond suspicion, do not report miracles. So those who tell miracle stories are deluded or live in fantasy and illusion.

Hume (1777, sec. 10.2.93) claims that religion deprives people of common sense, and so religion is the usual source of miracle stories. The dreamlike feelings of awe that miracles produce may overcome one's capacity to reason. According to Hume, a believer (1777, sec. 10.2.93) "may know his narrative to be false, and yet persevere in it, with the best intentions in the world," as a result of the wishes and passions that feed the delusion. Furthermore, the delusion of belief in miracles might arise from a lack of enlightened education, as in the case of Hume's "ignorant and barbarous nations," or as a result of a misleading education of civilized people by their ignorant and barbarous ancestors (Hume 1777, sec. 10.2.94).

Hume argues that people believe in or experience miracles, despite the lack of evidence from experience,[2] because of the positive affect miracle illusions inspire. The feelings of wonder aroused when one hears the story of Jesus healing the sick and the blind, or when one has the impression that God has saved him from sheer catastrophe, are an anesthetic to cognition and reason, leading to what may be rightly referred to in psychological terms as a neurosis. This emotional neurosis hampers the capacity to effectively perceive the external world. With reason impaired, the possibility to believe in miracles becomes available. One is either ignorant and deluded, or lying in an attempt to exploit the ignorant and deluded.

If we were to craft a psychology of miracles using Hume's paradigm, we would find a friend in Freud (1961). In the same way that Freud spoke of religion in general, he might have reflected on Hume's words regarding miracles and defined them psychologically as wishful illusions, interwoven with a disavowal of reality (Freud 1961). For Freud, religion is grounded in the need to fulfill infantile wishes. Instead of actively seeking to understand

and be in the external world, religion drives us to seek illusions that satisfy our narcissistic desires and dependency needs. Among these is the desire to find personal meaning and security with which to exorcize the terrors of nature (Freud 1961). Before the dangers of earthquakes, typhoons, hurricanes, floods, fires, and wild beasts, "man's helplessness remains, and along with it his longing for his father, and the gods" (Freud 1961, 22), who are seen as sources of protection and salvation.[3]

Under the lens of this psychology, miracles seem to express the wish for an omnipotent parent, God, who will do away with humanity's hardship by intervening in the physical world of time and space. There is a price to pay, however, for the wonder and security such events provided. Freud wrote that (1965, 206) "miracles . . . contradicted everything that sober observation had taught, and betrayed all too clearly the influence of human imagination" (cf. Freud 1965, 42). From his scant comments on the topic, one can discern that Freud believed our wishes for providential intervention diverted energies from the ego, which housed the rational and cognitive capacities, shifting them to the id, the source of pleasure seeking, narcissistic desire, and illusion. Thus, dovetailing with Hume's argument, Freud might have concluded that those who believe in miracles are experiencing a dysfunction in their capacity for reality testing, their ability to understand external reality and the experience it yields. Instead, they land in distortion of or projection on reality (Freud 1961, 54–57). Miracles are an illusion in which humans project on the world their needs for safety from the natural elements and warmth from a cold, unresponsive world. For Freud, this bore the stamp of serious mental illness.

It is my judgment that the Hume-Freud equation does not provide a sound basis for a psychology of miracles. Hume assumes that his view of the world is the correct one and that of believers in miracles is ignorant and barbarous, misinterpreting the nature of this world.[4] Hume holds his experience as normative, and any counterclaims are rejecting of practical experience altogether. Is it not likely, however, that the experience of Hume, the Scottish Enlightenment scholar, would be markedly different from that of a Caribbean shaman or a first-century healer? Could it be that the difference between one who believes in miracles and one who does not has more to do with his or her particular perspective and experience, rather than with ignorant and barbarous interpretation? Hume leaves no room for intercultural discussion or for the understanding of differing worldviews. As a background paradigm for a psychology of miracles, it is deficient, for it is unashamedly ethnocentric and does not allow for a consideration of the data experienced by those who believe in miracles.

In the Hume-Freud equation, a psychologist's research agenda would be to find out what psychological dysfunction is taking place in the person who believes in miracles. It is presupposed that something is wrong.[5] Such an

agenda would be an epistemological and ontological polemic in psychological drag, and not objective psychological research. The project would not be interested in why one would believe in miracles or what factors contributed to the formation of such beliefs, but in constructing arguments that consider such artifacts as illusions and the believers as delusional. This would also lead to a one-sided pseudopsychology, for much of its analysis would rest in matters *outside* psychology. It would be only after deciding what the *one true* reality is and the *one correct* approach is that one would begin the research to account for the neurosis that was preventing the proper perception of reality. That overlooks any attempt to understand the contexts, experiences, data, phenomenological evidence, and heuristic rationale driving a person's belief that a miracle took place.

A sound psychology of miracles must be objective and not interested in proving or disproving the appropriateness of belief in miracles. Moreover, it must begin with a motivation for understanding from the inside why believers hold that miracles are real. Thus exclusivist views that only one's own worldview reflects reality, or that only one's own religion has authentic miracles, must be avoided in a sound psychology of miracles. A sound psychology must be grounded in psychology, not in philosophy or politics.

AN ALTERNATIVE: A RELATIONAL PARADIGM OF MIRACLES

I wish to discuss a relational paradigm. This paradigm would suggest an interest not in debates between science and religion or God and natural law, but in the embeddedness of miracles within one's experience of mundane reality and one's relationship with what is considered ultimate and absolute. The relational philosophical tradition understands religious processes, symbols, concepts of the divine, rituals, dogmas, spirituality, and the miraculous as emerging from within the context of human interpersonal relations. For example, the particular elements of any one person's experience of God, as existing or not existing, of providential warmth or divine cruelty, are seen as arising from one's experience of closeness or distance, love or control, with other human beings (Macmurray 1957, 1961; Niebuhr 1960; see also Fowler 1974).

Through this unconscious process of depending on human experience for the construction of religious experience, one is developing a foundation for one's personality, a ground of being, with the purpose of integrating one's self and one's experiences (Niebuhr 1960; Buber 1970; Tillich 1958, 1963). Our relationship with God reverberates with all other close relationships, and all those intimate relationships connect to inform our relationship with God. Buber wrote (1970, 123), "Extended, the lines of relationships intersect in the eternal You." Tillich (1958, 1963) would have agreed. Although we

may discuss the differences between these authors, for our purposes here, the ties that bind them together within this paradigm are their understanding of religious matters as intrinsically rooted in human relationship.

"Faith," wrote Tillich (1958, 1), "is the state of being ultimately concerned." To be ultimately concerned is to cultivate a relationship between one's subjective capacity for seeking meaning and significance and an object that is perceived as the self "expressed in symbols of the divine" (Tillich 1958, 10). What we consider to be ultimate demands our full attention and the fullness of our capacities (Tillich 1958) as "an act of the total personality" (Tillich 1958, 5). Tillich claims that faith cannot be pigeonholed into any single category of our subjectivity. It is not "an act of knowledge that has a low degree of evidence" (Tillich 1958, 31), nor can it "be restricted to the subjectivity of mere feeling" (Tillich 1958, 39).

Faith is not the inability to line up one's belief with the available experience, but the ability to relate to an object experienced, as though it is profoundly meaningful. Faith is not the state of being blinded by childish, overeager emotion, but the ecstasy of attaining a coherence that makes sense of one's life experience. Not irrationality or delusion, but meaning making is what propels faith within the individual, for it "gives depth, direction and unity to all other concerns and, with them, to the whole personality. A personal life which has these qualities is integrated, and the power of a personality's integration is his faith" (Tillich 1958, 106).

In the process of integration of one's life experience, faith could be said to operate through certain capacities of reason that enable us to grasp and shape reality (Tillich 1963, 75). While we experience our world subjectively, our reception of that data and reaction to it fashions our relationship to our world (Tillich 1963, 76). That data will be physical, psychological, cultural, religious, and spiritual. We use it to construct our sense of our world. Cultural norms and prohibitions, common beliefs and community values, and our own tastes and preferences spice this data and influence our worldview. In this sense, our world is perceived objectively and created subjectively, a consideration that leads Tillich to suggest that when we perceive (1963, 76), "an act of shaping is involved," and when we respond, "an act of grasping is involved." Our reality is transformed in accordance with our perception, and reality is perceived "according to the way we transform it" (Tillich 1963, 76).

As indicated in his *Systematic Theology*, Tillich considers the popular concept of a miracle as violation of natural law to be a (1963, 115) "term misleading and dangerous for theological use"; however, he cannot find a substitute that will express what he thinks may be a genuine experience of the miraculous. So he settles for the Greek term *semeion*, "sign," to emphasize the religious nature of the meaning that miracles afford one. Tillich deemphasizes the (1963, 115) "bad connotation of a supranatural interference which

destroys the natural structure of events." Tillich is interested in salvaging the role of miracles as revelatory events fraught with deep religious significance. They are awe-inspiring events that provide new revelations of the state of one's being, while at the same time shaking the core of one's being.

Tillich writes (1963, 116), "The sign-event which gives the mystery of revelation [to a miracle] does not destroy the rational structure of the reality in which it [the miracle] appears." The sign-event/miracle does not violate the rational structure of reality in the sense that a miraculous event can only be (or not be) in the context of a subject's grasping and shaping of the experience. D. W. Winnicott (1971) says that we discern reality in accordance with our experience of our sociocultural environment. We experience and believe in miracles if they are present in the epistemological and experiential economy of our psychosocial or spiritual context.

For a member of a charismatic evangelical Christian community, miracles are perceived to take place in the life of others or of oneself. Miracles are celebrated, rehearsed, and reenacted through the reading of the biblical texts that reinforce the person's or community's awareness of them. Someone socialized in an opposite type of community would likely have an opposite experience of reality, in which miracles are neither expected nor experienced. Tillich's argument that miracles do not violate "the rational structure of reality in which they appear" means that they do not violate the *perceived reality* of those *to whom* miracles appear. Turning back to Hume for a moment, one can see the sense in his argument that miracles would violate his reality if they indeed took place. It is unreasonable, however, for Hume to extrapolate from his arbitrary philosophical claim that miracles would violate the reality of a first-century leper who was healed and believed it was done by a deity or healing shaman with transcendental power.[6]

While miracles do not violate the reality of those who perceive them, they do, nonetheless, convey religious meaning that is life changing. Reflecting on the diverse miraculous stories handed down from religious tradition, Tillich finds it (1963, 116) "striking that in many miracle stories there is a description of the 'numinous' dread which grasps those who participate in the miraculous events. There is the feeling that the solid ground of reality is taken 'out from under' their feet." The experience of the miraculous upsets the self's sense of security, leaving it vulnerable but also receptive to the revelation to which the miracle is serving as a sign-event. This revelation reflects the state of one's relation to the meaning of life and the experience of the transcendent world. This unsettles the life one had before. It both challenges the self's conception of its ground of being and invites a reassessment of that being and a reshaping of that self.

Our relational paradigm suggests that a sound psychology of miracles must seek to contextualize them within the realm of a person's religious, cultural, and interpersonal experience, realizing that the experience of the

miraculous emanates from a broad conception of the divine. The person's image of the divine is seen as acting in his or her life to restore a sense of security lost amid the challenges of daily life. The resolution of this loss of security is the experience of the divine intervention that restores the self. How this functions in a given person's life will be influenced by the communal context. Accordingly, a psychology of miracles must discover the meanings and emotions in a person's culture and the interpersonal world that are being reenacted in the person's experience of God and of God's intervention in that person's world. That set of experiences defines what the person sees as miracles.

TOWARD A PSYCHOLOGY OF MIRACLES

Although relational psychoanalysis and attachment theory at times seem to be in conflict in the psychology of religion, as regards method, epistemology, and empirical validity (Granqvist 2006; Rizzuto 1979; Wulff 1991), there is much to be gained for a psychology of religion from a theoretical integration of the two.[7] In her landmark study of human development of the God-image, Rizzuto suggests that (1979, 123) "properly investigated, under detailed and careful historical reconstruction, God's representational characteristics can be traced to experiences in reality, wish, or fantasy with primary caretakers in the course of development." Experiences of empathy, compassion, rejection, or neglect by one's caregivers lay the groundwork for the formation of our image of God.[8] The impact of the parent/caregiver's behavior on the God-image is such that even his or her very physical characteristics may be melded on a physical image of God. Such was the case of one of Rizzuto's patients, who, after finishing a drawing of her image of God, remarked about how she forgot to draw his whiskers.[9]

Although Rizzuto gives much attention to the influence of parental behavior on the child's image of God, she also discusses other relationships and life patterns that are established in the child. Not only is the parent reimagined in the image of God, but so is the sense of self experienced within that object-relationship. It is a two-way dynamic. The God-image will shape one's life, but one's life experience will revise the God-image:

> Defenses begin working to protect the individual from anxiety and pain. If the relevant objects of everyday life are a source of pain, God may be used, through complex modifications of his representation, to comfort and supply hope. If they are accepting and supportive, God may be used to displace ambivalence and angry feelings, or as a target for disturbing and forbidden libidinal longings. (Rizzuto 1979, 89)

In this sense, Rizzuto argues that God is a transitional object (Winnicott 1971) unconsciously crafted from the representational fragments of one's

inner world for the purpose of establishing a cohesive sense of self. As a transitional object, the God-image may be used for ego-synthesis or rejected when it fails to keep up with a developing self. Like the transitional object, God is both a product of the subjective world of the person and of the objective world of culture and of personal experience. It is in that sense that Rizzuto, using Winnicott's terminology, remarks that God is (1979, 87) "a psychically created object who is also 'found.'"

According to Rizzuto, God becomes both a carrier of the individual's parental object-relations as well as a point of reference for the interpretation of events in the world. Any and all events affecting a person will fall under the lens of his or her life history as well as under the eyes of his or her image of God. A natural catastrophe, such as a massive flood or earthquake, may lead one to seek comfort in one's image of God, using it to explain the event as a test or a punishment for ill deeds. God may provide new meaning with which to cope with adversity, meaning that may be reinterpreted and reworked in accordance with the surrounding environment. But it is not only a matter of external events being interpreted from the viewpoint of the individual and his or her God-image, for even

> so-called actions of God in the realities of our lives (his responses to our prayers, his punishments, his indication of what we should do) rest upon our interpretation of events and realities to accord with our state of inner harmony, conflict, or ambivalence with the God we have. (Rizzuto 1979, 87)

Jones (1991, 1996, 1997, 2002) has also expanded the psychodynamic study of religion by introducing post-Freudian and object-relations theories. Jones (1991) reviews the movement within psychoanalysis from Newtonian-Galilean, classical psychoanalysis to post-modern relational models of psychoanalysis and applies this new paradigm to religion. Drawing together insights from British object-relations theory, self-psychology, and intersubjectivity theory, he employs a post-Freudian understanding of transference as his main tool of analysis of the function of religion. Instead of being a projection of childish wishes, transference is understood as the person's "basic patterns of relating and making sense of experience" (Jones 1991, 84). It is the unconscious process by which those patterns of behavior, affect, and experience with the world around us are internalized, leading to the construction of organizing themes, which help guide behavior as well as interpret and organize future experience.

Jones posits that these (1991, 110) "internalized affective relationships" lie at the heart of a person's image of God. Following Rizzuto, Jones argues that children's experience of comfort or neglect with the primary caregivers forms a crucial part of their image of God; however, he makes an important distinction between his understanding of the dynamic and that of Rizzuto.

Jones writes (1991, 47), "Although it is clear that the internalization of objects cannot be separated from our relationship with them, Rizutto tends to focus more on the internalized objects themselves and less on the internalized relationships." Rizzuto's focus is on the objects relevant to the development of a self—parents, caretakers, peers—and the way those objects are internalized as crystallized entities in the psyche. Jones, on the other hand, acknowledges the impact of objects, while focusing on how the *relationship* with the object is internalized and becomes a pattern of behavior throughout life.

In essence, it could be said that Rizzuto's theory involves the analysis of the *object*-relation (characteristics of certain objects internalized), while Jones' theory emphasizes the object-*relation* (life themes experienced in a relationship). Without pushing this point too far, it is necessary to point out their theoretical differences for the sake of also delineating the ways in which their works form two sides of the same relational psychoanalytic coin. Their works are complementary.

Under the lens of a post-Freudian understanding of transference, religion is defined "not primarily as a defense against instincts or a manifestation of internalized objects," Jones (1991, 63) argues, "but rather as a *relationship* (with God, the sacred, the cosmos, or some reality beyond the phenomenal world of space and time)." This relational paradigm

> focuses the psychoanalysis of religion on the *affective bond with the sacred* and how that object relation serves as the transferential ground of the self. Such an analysis seeks to uncover the ways in which that relationship resonates to those internalized relationships that constitute the sense of self. . . . Our relationship to the transcendental reality, or lack of it, enacts and reenacts the relational patterns present throughout our life. (Jones 1996, 44–45)

Thus a person of low self-esteem may ground that sense of self in a critical, judgmental God. Or alternatively, such a person may develop an image of God that is patient, tender, and forgiving, developing an object-relation that sustains that sense of self. No matter how much one falters, God will always be there, ready to forgive and accept one as is. Such a perceived relationship with God serves as a point of reference to the invariant themes in a person's life, organizing the affectivity generated in his or her experiential world. For Winnicott, transitional objects are, in the end, outgrown, after they have served their purpose in the infant's psychological development; however, while transitional objects are set aside, the capacities for meaning making that spawned them are not. As Jones explains, the creativity and imagination of playful infants do not simply disappear, but instead "become spread out over the whole intermediate territory between 'inner psychic reality' and 'the external world as perceived by two persons in common,' that is to say, over the whole cultural field" (Winnicott, as quoted in Jones 1991, 60).

This capacity to create symbols allows the developing person transitional experiences "of artistic creativity and appreciation, and of religious feeling, and of dreaming" (Winnicott, as quoted in Jones 1991, 60). From this viewpoint, Jones' understanding of the God-image, and other aspects of religion, is rooted in its development from a transitional object into a transitional experience able to (1997, 120) "allow entrance again and again into that transforming psychological space from which renewal and creativity emerge." Psychologically speaking, religious practice and spiritual experience "reverberate with the affects of past object relations and are pregnant with the possibility of future forms of intuition and transformation" (Jones 1997, 120).

Kirkpatrick introduces Bowlby's attachment theory, which (1997, 115) "postulates a primary, biosocial behavioral system in the infant that evolved to maintain proximity of the infant to its primary caregiver, thereby protecting the infant from predation and other dangers" (cf. Kirkpatrick 2005, 28). Under normal circumstances, "the infant develops a secure attachment to the mother in which she is perceived as a reliable source of protection and security, . . . an important influence on behavior 'from the cradle to the grave'" (Kirkpatrick 1997, 115–16). Kirkpatrick indicates that Bowlby specifically intimated that the child's internal working models (IWM) of attachment developed early on and (2005, 39) "were carried forward into adulthood as models of close relationships."

Kirkpatrick believes that among the kind of relations that are affected by such IWM in ongoing life are those that are perceived to exist with God, angels, Mary, or any other supernatural being. He considers the analogy between the attachment relationship with a caregiver and a relationship with a divine being to be

> striking. . . . The religious person proceeds with faith that God (or another figure) will be available for protection and will comfort him or her when danger threatens; at other times, the mere knowledge of God's presence and accessibility allows a person to approach the problems and difficulties of daily life with confidence. (Kirkpatrick 1997, 117; cf. Kirkpatrick 2005, 52)

Of course, Kirkpatrick believes that the relationship with God is not like an attachment relationship, but really is an attachment relationship. To support this contention, he argues that a person's image of God serves many important functions, which attachment figures normally fulfill.

Attachment theory posits three conditions under which the attachment system is activated: "(1) frightening or alarming environmental events, that is, stimuli that evoke fear and distress; (2) illness, injury, or fatigue; and (3) separation or threat of separation from attachment figures" (Kirkpatrick 2005, 61). In the face of death, crisis, catastrophe, and illness, people turn to God for protection, support, and healing. Even in circumstances of familial

rift with one's own parents, one may seek comfort from God as one's ever-loving caregiver, invoking Psalm 27:10: "Though my father and mother forsake me, the Lord will receive me." Thus, when Kirkpatrick applies these hypotheses to religious experience, he concludes with the fact that (2005, 62) "people primarily turn to God . . . when *severely* distressed is thus consistent with an attachment interpretation." God acts as an attachment figure in the way in which he serves as a haven of safety, to allay anxiety and restore security to the person. God also acts as a secure base, serving as a foundation from which one may push forward against the adversities of life. Like a child whose supportive relationship with parents has led to a secure and able self, a person of faith goes forward with the understanding that God provides the support needed to overcome difficulties (Kirkpatrick 2005, 66).

With regard to individual differences in images of God, the two primary dimensions identified by Benson and Spilka (1973) as loving God versus controlling God, Kirkpatrick notes that they (2005, 83) "appear to map neatly onto the two primary dimensions of *parenting* that have been widely studied in the developmental psychology literature." This is usually conceptualized as either warmth versus control, responsiveness versus demandingness, or care versus overprotection (see Kirkpatrick 2005, 83). These parallels between images of God and images of primary caregivers "would be expected if thinking about God is guided by the psychological mechanisms designed to process information about parental care giving" (Kirkpatrick 2005, 83–84).

This consideration is particularly relevant to Kirkpatrick's hypothesis on the positive relation between images of God and of one's parents, which he terms the *correspondence hypothesis* (2005, 108): "Children who perceive their attachment figures as loving and caring tend to see themselves as worthy of love and care." If, through his or her human attachments, a person sees himself or herself as worthy of love and care, then his or her generalized IWM would suggest that God is also loving and caring. The opposite is also true.

Apart from the positive correspondence between IWM of parents and God, Kirkpatrick also formulates an alternative hypothesis that is designed to study the negative relation between human and divine attachments. From the perspective of this *compensation hypothesis*, "the importance of God as an attachment figure might be greatest among those people, in those situations, in which human attachments are perceived to be *unavailable* or *inadequate*" (Kirkpatrick 2005, 127). An environment that is perceived to be chaotic, offering no safety or security, might predispose the self to find that security, order, and affection "in a God who is, in important ways, *unlike* one's human attachment figures" (Kirkpatrick 2005, 127). One interesting example of this possibility is some research suggesting that people with insecure relationships with their parents are more prone to sudden religious conversions (see Kirkpatrick 2005, 130). Through these religious conversions, the new believers may find in God the perfect, loving parent they never had. Their attachment relationship to a

loving God may help a particular self recuperate from an environment fraught with conflict and ambivalence, compensating for the much needed security that was never provided.

Granqvist (1998, 2002; see also Granqvist 2006) proposed a rereading of Kirkpatrick's data, in which he argued that attachment to one's parents does not moderate the image of God developed, but that attachment makes the socialization to their beliefs more feasible when it is secure, but not when attachment is insecure. Granqvist (2002) defined his version of Kirkpatrick's hypotheses as *socialized correspondence* and *emotional compensation*. Socialized correspondence, in this case, meant "the parallel between one's religious beliefs and one's parents' beliefs, rather than, as in [Kirkpatrick's] interpretation, between one's religious beliefs and the security of one's own attachment style (or prior attachment experience)" (Kirkpatrick 2005, 114–15). Granqvist used the phrase *emotional compensation* to refer to individuals who were not able to have secure relationships with their caregivers and hence could not internalize their religious beliefs. Instead, they develop alternate religious beliefs and an attachment to God that regulates experience in such a way as to help foster a more secure self in spite of problematic parental relations.

TAKING STOCK: WHAT COULD A RELATIONAL PSYCHOLOGY SAY ABOUT MIRACLES?

The relational paradigm would suggest that the psychologist should focus on miracles as expressions of a relationship, or a matrix of relationships. On the other side of the miracle perceived by the individual is an image of the sacred, or more specifically, an image of God. Rizzuto might advise us to take a closer look at that God-image and attempt to reconstruct what object-representations lie behind it. A father who grants all the desires of his children? A mother who would help her child at the very last moment of his or her struggle? Perhaps a mixture of parental elements? From a strictly *object*-relations approach, one would have to ask, What is the nature of the God at the other end of that miracle, and what parental object-representations unconsciously pull its strings in performing that miracle?

Jones would point us in a parallel direction, focusing on what *affective bond with the sacred* a miracle might reflect. In tandem with an analysis of the possible parental images behind the God-image, Jones would also have us look at what life patterns or organizing principles are reflected in the miraculous event itself. What kind of experience might be revisited in the feeling that God spared one from an imminent death in a car crash? What meaning and affect are evoked when one is declared healed of a disease or cleansed of ritual impurity? One would have to contextualize the miraculous experience within a person's overall experience of the divine, understanding the role it

plays within one's experience of God. In studying the meaning of that miraculous experience in the context of that relation to God, the psychologist must also contextualize both the miracle and the relation within the person's life narrative. Laying both side by side, the presence of common principles of experience, organizing principles, are bound to emerge: patterns of behavior or experience that govern interactions with others and with the world in general, drawn in part from interactions with the caregivers, but following one through life.

Jones would also point out that miracles and miraculous experiences are not just repetitions of one's past, but can also be transformative. In his use of Winnicott, it is especially apparent that when one unconsciously uses past relational and schematic scripts of interaction, one opens up the possibility for the transformation of those scripts and the creation of new ways of being-in-the-world (a Heideggerian term). In that transformative sense, we would do well to refer to miracles conceptually as transitional phenomena, following Tillich's discussion of miracles as events that renovate present conceptions of one's self and reveal new opportunities or ways of being.

Another sense of Winnicott's terminology employed heavily by Rizutto that is relevant for our discussion of miracles is in the transitional experience between the subjective world of the person and the external objective world.[10] A psychology employing Winnicott for the study of miracles could also define them as transitional experiences in the sense that they do not belong entirely to the objective world of rocks and chairs, but at the same time, they do not belong completely to the subjective, psychospiritual world of a given person. Miracles belong in a transitional space that is between subjective and objective and involves both in mutual interaction. Tillich's understanding that one shapes reality, while, at the same time, is grasping it certainly finds much agreement with Winnicott's contention that transitional phenomena are both created and found.

The relational paradigm as sampled in Tillich also speaks of the numinous dread experienced when the miraculous shakes up a person's world and the "ground of reality is taken 'out from under'" his or her feet. In other words, miracles as transitional experiences render asunder the self's sense of security, broken down to be brought back up in a new way. A new determination may be produced and security reestablished in a new way of relating to God and the world. Some relationships and ways of relating may be severed, with new relations and ways of relating instituted. The resonance with the themes of attachment, safety, and security in attachment theory here is unmistakable.

So an important theme in miraculous experience is the issue of security and attachment. I see a parallel between the triggering of the attachment system in times of stress and the miraculous experience, depicting a setting for safety and security in divine intervention. Some crises upset a person's

state of being, leading the attachment system to be activated. As discussed via Kirkpatrick, a person's relation with God is itself an attachment relationship, meaning that under times of adversity, God's protective or alleviating capacities are activated, lending support to the person in coping with the problem at hand. This also provides a heuristic interpretation and resolution of the suffering. IWM of the self in turmoil and of the self overcoming the turmoil are involved. What IWM could also be activated that would aid the self in regulating its emotions and in resolving conflict? Certainly those of the self being soothed by one's caregivers to endure difficulty, and even of caregivers helping resolve problems when one's resources have reached their limit.

Considering that IWM of God's behavior are regulated in part by higher-level IWM based on experiences with one's caregivers, we can expect to find a similar dynamic. The experience of miracles, then, must be drawn from IWM of the self's loss of security and present helplessness, followed by IWM of the restoration of security by the intervention of a divine caregiver. As alluded to in the previous paragraph, it is certainly a possibility that a miraculous experience corresponds to past experiences of protection with one's caregivers. Another consideration involves the ways in which a person's experience of a miracle compensates for the lack of consistent security from parents and the experienced world. If an image of God who can provide that security serves to compensate for the lack of it from a nonresponsive parent, one may explore how a person's experience of miracles extends from that compensation. Another consideration that can be drawn from attachment theory involves Granqvist's contribution highlighting the importance of socialization in the development of IWM of the miraculous and of the way these affect our experience of them.[11]

CASE STUDIES: APPLICATIONS OF A RELATIONAL PSYCHOLOGY OF MIRACLES

The following two cases illustrate how some of the psychological dynamics we have discussed actually operate. Notice the psychological nature of the person's image of the divine, the organizing principles or relational patterns reflected in the miraculous, the role of themes of security in the modulation of the experience, and the continuity or discontinuity between the experience and previous IWM. The sociocultural contexts in which the experiences took place are also important. The cases are drawn from interviews with Christians from two different ethnocultural communities. They were asked about their miraculous experiences, their feelings and images of God before and after the experiences, and their life histories leading up to and after the miraculous experiences. The names have been changed to ensure privacy.

John, age 21, was driving to his father's house one evening, when his car was suddenly struck from the side by another vehicle. His car spun around,

flipped over, and was totally destroyed. John crawled out from the wreckage dazed, suffering only minor cuts and bruises. In the aftermath of the accident, John emphatically thanked God for having saved his life. When questioned regarding this assertion, he claimed that in the moment between being hit by the other vehicle and his car flipping over, he initially felt that he was going to die. "I just froze when the other car lights appeared. When I felt the car hit me, I just thought, 'Oh my God, I'm going to die!'" He relates how in that moment, when his car was flipping in the air, he suddenly felt a presence, as if someone was holding him tightly inside his car, cushioning him from the effects of the crash. When he crawled out of the car and turned around to witness the extent of the damage, he explained, "Like the two men on the road to Emmaus [Luke 24:13–34], I didn't recognize that it was Jesus saving me inside that car until afterward!"

It is most enlightening from a psychological perspective to see this event within the context of John's life. He was raised as a Protestant Evangelical, receiving much of his instruction from his father since John's mother had died at his birth. John described a very affectionate relationship with his father, who had balanced his work with the demands of raising a child as a widowed parent. It appeared that one way John's father had coped with his mother's death was to engross himself in his religion, always invoking Jesus Christ to protect him and his remaining family, his only son. The language of salvation and Jesus Christ as an ever watching parent was quite pervasive, not just in John's father's devotional life, but also in the Evangelical church they attended. One particular theme reinforced in the church's theological rhetoric was that of the helplessness of human beings in a hostile world and their necessity of an omnipotent, ever present God to protect and love them in the midst of that world.

One incident that held deep significance for John was when, at the age of eight, he was almost run over by a car at a birthday party. At one point, the dog of the birthday girl had gotten out of the house and run across the street. When John tried to catch the dog, he heard the loud honk of a car coming right at him. In the moment that he faced the oncoming car, he froze, when suddenly, he was swooped up from the ground by his father, who was praying and sobbing, thanking Jesus for saving his son.

John's life entered a new chapter as he left home to attend college. He dealt with the demands of school and work, while balancing new friendships and a girlfriend; however, his religious beliefs prevented him from engaging in certain practices commonly enjoyed by some college students, such as drinking and leisure sex. This lifestyle was met with some rejection from his friends and strained his relationship with his girlfriend. Things became even more complicated when he found out that his girlfriend was having an affair with one of his friends, effectively ending the relationship for him and estranging him from his friend. Because his girlfriend and his friend both belonged to the same peer group, John became even more distant from those he knew at school. The feeling of isolation led him into a depression. To cope with the recent events, John decided to visit his father after work one evening. It was then that the auto accident took place.

From an attachment perspective, we can see a correspondence, then, between the image of Jesus protecting John and holding him tightly in the midst of the accident and his father pulling him away from an oncoming car and holding him tightly as he thanked Jesus for protecting him. The loss of relationships in college had threatened his sense of security as he became more isolated, with this car crash threatening his very life. The attachment system became activated, leading John to reexperience that feeling of being held tightly in the face of danger. Speaking psychoanalytically, we can also see the resurgence of an organizing principle, which stressed the dependence of a helpless son on an omnipotent father, who offered unconditional protection and acceptance.

This object-representation of an omnipotent, loving father, reinforced both by the parental relation and the theological language of a particular community, stood behind John's image of Jesus. The accident and the perceived miraculous intervention reinvigorated John during a time when he faced alienation and rejection from the peers he had once trusted. He felt that even in the midst of his suffering in a world hostile to him and his beliefs, Jesus still loved, cared for, and protected him. This expression reminded him of his relationship to Jesus as a meaningful source of empowerment for coping with his problems.

Naomi, age 32, was on the verge of a painful divorce, fearing for the well-being of her two children. Financial problems and her husband's increasing alcoholism had eaten away at their marriage, with heated arguments placing more and more distance between them. One day, after another argument, her husband left her and the children, promising divorce. Although their troubles and her husband's behavior angered her deeply, she actually loved him and blamed herself for everything: their financial troubles, her husband's increasing desperation, the marital disputes, and his eventual desertion of the family. Their separation beset her with fear for her children since they had to live with only her income. She began to feel completely hopeless. She believed that God was punishing her for her dishonoring behavior toward her husband. A month later, her husband returned, having found a new, higher-paying job, and asked for her forgiveness. Naomi and her husband were reconciled, resolved their financial situation, and have been able to form a stable family with their children. "When my husband showed up at my doorstep," she explains, "talking about a new job and wanting to reconcile, I just couldn't believe it! It was a miracle of God!"

Following the theories discussed above, we turn to the context of Naomi's life to shed light on the psychodynamics of her miraculous experience. Her earliest memories involve the image of a happy family: a loving father, who doted on her every want, and a mother who cared for her every need. She was especially fond of her father, who often played with her after returning from a hard day's work, while her mother prepared their dinner. Unfortunately, when Naomi was around the age of six, her father mysteriously left the household. She never understood why her father had left, and her mother was never willing to speak about the matter. Rumors

around her community circulated, however, that he had gone to live with another woman. As Naomi grew, her mother became more demanding of her around the household and in her daily life, often invoking God's wrath on a child who would not honor her parent whenever she would not do as she was told and whenever she failed to carry out a task with perfection. Her mother was especially imposing on Naomi when she began to date in high school.

Naomi was confused as to why her loving father had left the family so suddenly and without reason. The idea that her good and loving father had left her, coupled with her mother's now ever present emotional punishment, led Naomi to conclude that he had left because she "was a bad girl, why else would my dad have gone away? Why else would my mother punish me so?" This self-image was certainly reinforced by her mother's use of God to validate her righteousness, while reminding Naomi of her badness: as a bad daughter and later as a bad girlfriend and as a bad wife. God was an almighty judge with a watchful eye set on Naomi's "rebelliousness" toward her mother and her "wickedness" in her relations with men. He took stock of whenever she disobeyed her mother or could not perform a task efficiently.

The experience of overbearing demandingness from her mother and perceived demandingness from God led Naomi herself to become increasingly demanding and critical in her personal relationships. Her mother would often disapprove of the men Naomi dated, pointing out supposed economic and moral shortcomings. Naomi, in turn, became very demanding of her suitors, as she sought to make them "good men, good enough for my mother." The twofold pressure from a possible mother-in-law and then from Naomi herself often turned these men away, leading Naomi to turn on herself, dwelling on how her attitude had not only cost her the relationship, but on how her own moral failings shamed her mother and her God.

The man Naomi eventually married was described as a wonderful man, a family man who worked hard to please her and their two growing children. They lived well financially until the birth of their second child, when it became necessary for Naomi to take a job to help supplement the family income. This led to criticism from her mother, who shared the views of the church Naomi had grown up attending. Her church, which she had attended from her childhood to her marriage, presented the image of a wrathful and condemning God. This included very stern teachings about a man's role as the head of the household, the breadwinner, and the ultimate provider. Women who held a working job, thus, were frowned on.

This greatly upset Naomi, who in turn began to criticize her husband for his financial failings in providing for the family without her income. In the long term, she began to see this as moral failing as well. The pressure from his financial and familial situation began to take its toll, and so the husband began to take up some casual drinking after work. "Although he never really became a drunk," Naomi clarified, "the very fact that he had begun to drink angered me." She became more critical of his behavior, which pushed him to the point of wanting to leave the marriage. After a

heated argument, he left the home, and with his leaving, once again, Naomi turned her anger against herself, blaming herself for everything.

When her husband returned a month later, asking for forgiveness for having left her and the children, and explaining that he had found a new job that would help cover all of their needs, something changed inside Naomi. "That he would come back with this new job, wanting to make it work with me and the kids . . . it was a miracle!" God had brought her husband back and restored her family, "but that *felt* different," she claimed, "because God was always taking things away from me for being bad. Here he was giving my family back. Did that mean I was good enough to have them?" The question struck a chord with Naomi, as the miracle she experienced challenged her notion of who God was.

The understanding that God loved her enough to intervene and bring her husband back led her to think of herself not as a bad person, but as one less than perfect who was more than deserving of love. God, for Naomi, became more forgiving and empathic, aiding her in her time of need, instead of criticizing her in the face of her failures. This was reflected in her reaction to her husband, whom she forgave for leaving, and in turn asked him for forgiveness for the difficulties she herself had caused. She could acknowledge her failings and those of her husband without demonizing either, gaining peace with herself and learning how to deal more effectively with interpersonal conflict. Her new understanding of God helped her keep a certain emotional distance from her mother's disapproving tone, as she reconciled with her husband. She even continued to keep her job without any guilt of transgressing religiocultural norms or because of her mother's thoughts of how a woman should behave.

The confusion over the loss of her father, together with her mother's overly critical stance toward her as she grew into teenhood, and even adulthood, led Naomi to conclude that she was a bad person who could not do anything right. She had internalized not only the feeling of badness, but also the behavioral pattern of demandingness, which she continued to act out in her relationships with others, particularly her romantic relations. Her mother would disapprove of them, Naomi would in turn become more critical of them, and they would leave her without ever coming back. Then she would berate herself for being so demanding, for being a bad daughter, a bad girlfriend, and finally, a bad wife. This dynamic also played out in her image of God, who was a jealous judge looking down to condemn human weakness and frailty: Naomi's failure to honor her mother, to be a good Christian woman, or to be a good Christian wife.

When her husband left, and she assumed he would never return, the stress caused her sick attachment system to be activated, with its attending IWM of self and others. This led to the same self-denigrating behaviors, with the image of God looking down on her with contempt. When her husband returned wishing to reconcile, he went against her IWM, her organizing principles, challenging the structure of her beliefs and patterns of behavior. She saw the incident as a miracle: God had intervened in her life to return what was lost and restore what had crumbled. With the

crumbling of her family, there was also a crumbling in her sense of security and selfhood. With the restoration of her family, there was a restoration of her sense of security and selfhood. The new security, invoked by this miraculous experience, gave Naomi a new understanding of God, who had changed from a critical judge to a more benevolent and tolerant father. Indeed, she reckoned that she "had found the father once lost." We can see in this dynamic also a compensation process, whereby this new image of a God of tolerance and empathy acted inversely to her old God-image of intolerance and control. One might also argue for the resurgence of Naomi's image of her affectionate human father, and the positive affection she held for him, as an influence on her new image of God.

CONCLUSION

In this chapter, I have carved out a psychology of miracles using a relational paradigm and employing key insights from relational psychoanalysis and attachment theory. What, then, is a crisp psychological definition of miracles that respects the conceptions of philosophical and theological discourse, without becoming subject to them? A miracle is a transitional experience, in which an emotional, social, or physical stress threatens the sense of security of an individual by confronting him or her with a striking counterintuitive event. This stress triggers the individual's attachment system and patterns of relating, the purpose of which is to allay anxiety and restore security. This focuses the system's activation on the IWM and object-representations of the self in relation to what it considers divine (God, Jesus, angels).

Depending on the particular subject-object correlation within the transitional experience, the person perceives that the divine attachment figure has intervened in the resolution of the crisis on his or her behalf, restoring a sense of safety. This perceived divine intervention then presents the person with a revelation, a new meaning that either reflects and upholds the person's IWM or leads to their transformation. Another, more simplified way of defining a miracle from a psychological perspective is as an expression of a person's relationship with what he or she deems to be the divine, in which the divine intervenes to allay anxiety, restore security, and provide a new meaning to an individual's life context.

Although great care has been taken here to define miracles within the bounds of an interactive subject-object relation (Winnicott 1971), the emphasis is on a subject's percepting the world in a psychological mode. The impetus for this chapter has been the shift from discussing miracles solely within Hume's paradigm to studying them within a framework that relocates them from the world of natural law to the world of dynamic interaction between a subject and its contextual experience. This relational framework asks us to reanalyze miracles using the lens of psychodynamic psychology, instead of philosophical epistemology or ontology. The considerations raised

by this alternate paradigm, in the end, lead us to redefine miracles, seeing them no longer as violations of natural law, but rather as reflections of the deepest meanings of a person's subjectivity.

NOTES

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1. As an example of the diverse and varied arguments pressed on both sides of these issues, see Larmer (1996).

2. Although one might argue that this is a clumsy circumlocution on my behalf, I actually have chosen this phrase to foreshadow some of the problems with the Humean paradigm for a psychology of miracles. I will detail the ways that the classical model is lacking subsequently.

3. One could trace the origin of Freud's (1952) argument of God as a substitute father figure to his work on totemism in *Totem and Taboo.*

4. A clarification is in order regarding my critique of the Humean conception of miracles. An important philosophical distinction, and one certainly employed by Hume, is the differentiation between direct sensory experience of the world and of one's analytic experience or analysis of that sensory experience. Within the psychological paradigm from which I am operating, I will discuss the term *experience* in a manner that incorporates both types, employing them at the same time. When I use the term *experience*, I imply both the reception of sensory experience of the world and the analysis of that sensory experience.

5. One might ask in passing how it is that one might turn from arguing that those who believe in miracles are epistemologically mistaken to contending that they are mentally ill. If one takes a look at Freud, it can be argued that his concept of a "reality principle" is in part a philosophical concept reified into a psychological category. Thus, for Freud, a person who believes in miracles is not just philosophically unnuanced and uneducated, but also suffers from neurosis.

6. Support for this interpretation of Tillich's discussion was also drawn from the Seventh Dialogue of *Ultimate Concern—Tillich in Dialogue* by D. Mackenzie Brown (n.d.). One comment of Tillich is most illustrative of his perspective: "miracles . . . are events which have a particular significance *to* the person who experiences them. That is the one fundamental statement. Miracles are subjective-objective, subject-object-oriented, always in correlation, and never comprehensible in any other way. Not merely subjective, they are not merely objective, either."

7. Indeed, similar attempts at integration between psychoanalysis and attachment theory have been taking place in regard to child and adult development, personality theory, and psychotherapy (e.g., see Fonagy 2001; Silverman 1991, 1994, 1998).

8. Although I cite Granqvist's publications here for reference, I will be relying more strongly on Kirkpatrick's presentation of his work.

9. Rizzuto writes, regarding this case (1979, 93), "When Fiorella Domenico was asked to draw a picture of God, she looked at me with mild surprise, accepted my request, and dutifully tried to draw. But she could not think of anything in my presence. She felt stupid, frustrated that she could not do it now. She asked my permission to go to her room, feeling certain she could draw there. She could, and did so without difficulty, returning later to give me the picture she had drawn. . . . The following day she laughed with her therapist about the incident, saying: 'Oh, wasn't that awful? I couldn't draw in front of her. I don't know . . . I didn't even put whiskers on him.'" It was very interesting to read Fiorella's comment in light of her therapist's report that she had described her father "as a mustachioed man" (Rizzuto 1979, 101).

10. Jones writes, concerning Winnicott's notion of transitional objects and transitional space (1996, 140), "The term *transitional* has two rather different referents: (1) those objects, like blankets and teddy bears, that are, as Winnicott says, 'neither inside nor outside,' and (2) a state of consciousness or mode of experience, a 'transitional space,' which transcends the dualism of inner and outer, subjective and objective." He argues that Rizzuto emphasizes the first sense of transitional as being neither subjective nor objective, while he emphasizes the second sense as a space of experience and transformation of the subjective and objective worlds.

11. For clarification purposes, if a factor in the development of a person's concept of God/miracles is the person's having learned it from his or her parents through socialization, then looking at this factor, I must acknowledge that it points to the fact that the concept existed in the person's broader social milieu.

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CHAPTER 4

Miracle Attributions, Meaning, and Neuropsychology

Raymond F. Paloutzian, Steven A. Rogers, Erica L. Swenson, and Deborah A. Lowe

Whether an event that people have deemed a miracle was actually caused by a supernatural agent or some other sacred act or thing, the process by which people come to conclude that an event was a miracle is psychological. It depends on what the event means to the person in light of the context and as learned from the past, from others, and from social groups and institutions, for example, from a religion whose history claims miracles. Our goal here is to understand the processes through which the mind attributes miraculous properties to events. To get there, namely, to learn how humans make miraculous meaning, let us (1) explore what constitutes the miraculous, for example, is an event deemed to be a miracle necessarily religious?, (2) elaborate the model of global meaning systems and its underpinnings from social and clinical psychology (Park 2005a, 2005b; Park and Folkman 1997; Silberman 2005), (3) situate the attribution process within a meaning system framework, (4) integrate the results, aided by the operation of related processes such as schemas, expectancies, and perceptual sets, and (e) incorporate some recent knowledge from neuropsychology that may shed light on how attribution processes might be mediated within meaning systems as information is processed within the brain.

Given this psychological approach to understanding miracles, the concern is not so much to find out whether they actually happened in the raw historical past or actually happen today. It is instead to learn how the human mind is able to construct and sustain the perception and abstraction of the miraculous, that is, how human mental processes work to make an inference that special, unique events that are different from those by which nature normally

operates cause a certain event to happen. It may turn out that what is miraculous, like what is true, is in the meaning system of the beholder (Paloutzian 2006). In the end, we hope that we can move one step toward the goal of an integrated, multilevel, interdisciplinary paradigm (Emmons and Paloutzian 2003) for understanding how people construct a perception of a miracle and the broader capacity of the mind to abstract, imagine, and infer causality.

MIRACLE ATTRIBUTIONS

A miracle is an event to which special, nonobvious causal processes, which are presumed to operate differently from ordinary natural processes, are attributed. Such an event is often considered a sign of something else (Woodward 2000). Events deemed miraculous may be of either an everyday, common sort or rare and unusual. Let us explore the scope of phenomena called miraculous.

Narrow or Broad?

Miracle Attributions to the Ordinary

Before explaining the two technically useful meanings of the term, let us illustrate the colloquial usage of *miracle*, the effect of which renders the term technically useless but psychologically revealing. This occurs when the concept is used to apply to everything such as when a minister or priest, while giving a weekly sermon or homily to the congregation, says that it is obvious that God performs miracles. The growth of plants, the appearance of the sun, the force of gravity that keeps us on the ground, the cry of a newborn baby are all miracles; everything is a miracle! This may or may not be so in light of whatever may be the true ultimate ontology, but categorizing all events as miraculous gets us nowhere as far as psychological understanding of how people come to think that an event is a miracle is concerned.

Extending this point means that colloquial uses of *miracle*—such as a religious person saying that every day is full of miracles, or an unemployed job seeker who receives a job saying that it was a miracle, or a person whose home was saved from a California fire saying that it was a miracle—are set aside in any technical sense because they cannot be said to be due to a fundamentally different process. But many people, nevertheless, attribute miraculous properties to ordinary events anyway. This is powerful evidence that humans have a need for meaning and that if a clear meaning is not present on grounds of logic or evidence, people will invent one (Park and McNamara 2006). If the capacity of the mind to read miraculous meaning into ordinary events is so strong, the ability of the human mind must be both strong and compelling to dogmatically insist on unique, supernatural, or other special processes to confirm the truth of purported past and future events deemed

miracles, though nonobvious, counterintuitive, and extraordinary. Whatever else humans are, they are meaning-constructing creatures. Our job is to learn how they do this in the context of attributions of the miraculous.

Miracle Attributions to the Unusual: Type N and Type I

While recognizing the concerns with the colloquial, religious, and spiritualistic uses of the term *miracle* in everyday speech, we highlight that there seem to be only two connotations of the term that are technically useful in setting apart from other events reports of experiences that are purportedly due to unique processes. Let us call them events deemed to be miracles of type N and of type I.

Type N includes those miracles that seem to conform to natural processes and are therefore explainable by known naturalistic means, although they may be accented or heightened versions of them. They seem to be prominent in major religions as an indication of the deity at work. For example, when the book of Exodus relates that God parted the Red Sea, it also says that a wind blew, the sea parted, and the children of Israel went across on dry ground. The parting of the sea was a type N event, and the attribution of the miraculous process goes to God plus wind, with wind as the natural part of the process. The book of Exodus also describes 10 plagues, most of which involved natural processes, including a red-colored form of algae or bacteria capable of making rivers look like they turned to blood, swarms of flies, hail, frogs, boils on human skin, and locusts in swarms sufficient to destroy vast crops.

In these cases, it seems that natural processes were at work as part of whatever other processes humans might invoke to explain the events. Similar examples of special type N events, often considered to be signs, are reported to have occurred at every major turning point in the life of Buddha (Woodward 2000). These include the synchronous appearance of swans, peacocks, parrots and other birds, trees and bushes that bloom out of season, lotus blossoms of very large size, and the spontaneous multiplication of supplies of honey, oil, and sugar. Analogously, Muhammad was said to have invoked Allah for rain, and it then started to rain heavily (Woodward 2000), an event of type N that followers deemed a miracle.

In contrast, type I seems inexplicable and instead requires supernatural or other special accounts; it includes those miracles that do not seem to conform to natural processes and are devoid of scientifically established explanations. For example, Jesus turning water into wine, for which there is no known chemical process; Jesus walking on water, for which there is no known antigravitational force; and a corpse dead and buried in the ground for several days resuscitating to ordinary life, for which there is no known biological process. These would be examples of type I. Similarly, Muhammad is said to have multiplied food and to have blinded an opposing army with a handful of

dust, and Buddha is said to have risen in the air, divided his body, and then rejoined the pieces (Woodward 2000). Events of this sort can perhaps be called "zap" or "presto" miracles, namely, the sort of event that a superhuman agent could presumably do by a snap of the finger or by merely speaking the event into existence out of nothing. The best common term that we can think of for the process behind events purported to have occurred this way is *magic*. People who believe in type I miracles believe in magic, as far as knowledge of natural processes is concerned.

Universal or Necessarily Religious?

Given that miracle attributions are made to both ordinary and unusual events, that they are purported to have occurred across cultures and time (cf. Waida 2005), and that they are especially prominent features of the world's great religions (Woodward 2000), it is easy to conclude that they are universal and uniquely religious and always attributed to the operation of a god or other agent, whose existence and function are counterintuitive; however, while reports of miracles seem to be made across cultures, they do not seem to be made by all individuals. Some people claim them and some people do not. Also, by observation of people's behavior, it seems clear that not all miracle attributions depend on a claimed religious base or postulate of an active counterintuitive agent, although from a scholarly point of view, such a base or postulate may be implied. For example, whereas the process that produced an experience deemed religious can be inferred to be of two sorts, namely, (1) from a counterintuitive agent or (2) a thing set apart, whether that thing is an object, idea, taboo, or ritual (Taves, forthcoming), the cause of an event deemed miraculous seems to require attribution to an agent of some kind, whose existence and function is counterintuitive, regardless of whether it is construed to be religious by people experiencing it.

Yet, although miracle attributions seem to be neither universal at the individual level nor necessarily religious, they are purported to occur today with such routine frequency that we are tempted to say that the claim of the unique is, paradoxically, ordinary. Without belaboring the point with endless news reports, suffice it to say that apparitions of the Virgin Mary, faith healings, and myriad other miracles are claimed. Moreover, the belief in a future miracle can prompt present extreme behavior. For example, some of the young men and women who have given their lives in the jihad against the West did so with the belief that they would be miraculously rewarded in heaven for having martyred themselves for Allah. In fact, one hypothesis could be that a human tendency to make miracle attributions is evident cross culturally in a fashion analogous to other phenomena (Rogers and Paloutzian 2006), suggesting that the tendency to make such inferences may have come about along with the tendency to imagine, in the early stages of the development

of human beings (Boyer 2007). But the ability to infer and imagine hinges on the ability to think in a way that enables the ideas about something to take on some other meaning.

Miracle Attributions and Meaning

It is obvious that an event that is called a miracle carries special meaning to those who so label it. Given the breadth of phenomena to which miracle attributions can be made, it seems clear that the inference that an event was caused by a miraculous process hinges not narrowly on the properties of the event, but on what the person perceives it to mean; that is, it does not hinge on the frequency, familiarity, or intensity of such events, although such factors might be taken into account. Specifically, a miracle attribution requires that a special meaning be ascribed to an event, instead of a mundane one. Thus a miracle attribution takes place within the larger system of meaning that the person uses to negotiate the world. Meaning systems are multilevel and include aspects from at least the social to the neurological levels of analysis (Park and Folkman 1997; Silberman 2005). Let us therefore examine the meaning system framework in which the deeming and attributing to nonordinary, nonobvious, or counterintuitive causal processes are made. We will then be in a position to explore possible neuropsychological substrates for such processes. People make miracle attributions in and through their meaning systems.

Meaning Systems

It has long been known that people need a sense of meaning and purpose (Baumeister 1991; Frankl 1963; Wong and Fry 1998) and that they use a variety of cognitive strategies to arrive at attributions about the causes of events (Malle 2004), including those most suggestive of miraculous processes; that is, humans are inclined to make supernatural attributions (Spilka, Shaver, and Kirkpatrick 1985). What needs to be assembled is a picture of the processes through which people arrive at miracle attributions based on the principle that a person has to fit new information that comes in through the perceptual system into the person's already existing global meaning system (Park 2005a, 2005b; Park and Folkman 1997). Teasing apart the components of a meaning system will help us understand how they interact in enabling people to make sense of life's events and how they work when attributions of miraculous processes are made.

Components

The components of meaning systems have been presented in different ways (Park 2005a, 2005b; Park and Folkman 1997; Paloutzian 2005; Silberman

2005), but each presentation seems to capture their essential features.[1] Briefly stated, *global meaning* refers to individuals' general orienting systems (Pargament 1997) and consists of beliefs, goals, and subjective feelings (Park and Folkman 1997; Reker and Wong 1988). People have a global definition of meaning that is partly captured by identifying beliefs and overall goals. This definition could be either explicit and clearly identifiable or implicit and less precisely seen. That the meaning is expressed in the beliefs and overall goals suggests that the person will have some sense of meaningfulness in life. Each of these, respectively, is translated into (1) interpretations of incoming information in light of the beliefs, (2) strivings for short-term project objectives, and (3) a daily or short-term sense of satisfaction and positive feeling.

Beliefs

When information enters a person's system, it is immediately perceived with the person's global meaning lens. The beliefs that guide the perception and interpretation of incoming information are central to how the person defines himself or herself and to whether the person fundamentally sees the world as safe versus unsafe, fair versus unfair, predictable versus random, just versus unjust, and loving versus hostile (Silberman 2005). Beliefs may or may not be cognitively optimal and include such assumptions as whether there is an ultimate being and, if so, what the nature of that ultimate being is, whether it supersedes all else about life, and whether it can be or is active in causing events to happen. Thus global beliefs, such as whether or not there is a god, justice, predictability, coherence, fairness, and responsibility, cluster to form the basic mental eyeglasses through which people interpret whatever experiences come to them (Janoff-Bulman and Frantz 1997; Park, Edmondson, and Mills, forthcoming). When people encounter discrepancies or situations that could challenge or stress their global meaning, they appraise the situations and assign a new meaning to them (Park 2005a, 2005b). Also, when people have a clear and global meaning system through which they see the world, they are preset to interpret new information to mean something consistent with that already-in-place system. The implication is that just as meaning shapes seeing (Koivisto and Revonsuo 2007), meaning also shapes inferences about what is seen, namely, about the processes that produce the events that one observes. This can include the attribution of miraculous process as the cause of events.

Goals, Attitudes, and Values

The aspect of meaning systems subsumed by the concept of goals can be thought of in both short-term and long-term senses (Emmons 1999; Paloutzian 2005). Long-term, generalized goals might better be called overarching purposes that define a general orientation for attitudes and actions over the

long haul. Specific goals might better be understood as near-term targets, places that a person wants to be within a realistic time frame. For example, an overall purpose might be "doing whatever God wants with my life," whereas a near-term goal might be something like "tell my wife and children each day this week that I love them." The adoption of a specific set of long-term purposes or near-term goals both feeds and is a reflection of three other aspects of meaning systems, attitudes, values, and self-identity-worldview (Paloutzian 2005), each of which is at an increasing level of abstraction relative to the others. But each one confronts and is confronted by the new information that enters the mental system, and these elements assess that information among themselves and against those aspects of the system that are superordinate such as global beliefs or a locus of ultimate concern. This constitutes an appraisal process through which the new information is either allowed to stand as is or must be altered to fit the system (Park and Folkman 1997). Thus the goals, attitudes, and value components of people's meaning systems can facilitate miracle attributions for those whose global beliefs prepare them to do so.

Meaning Making and Attributions

When the incoming stimuli do not fit with the existing global meaning, a person can process the information either by assimilating it or accommodating to it (Joseph and Linley 2005). If the information can straightforwardly fit the existing meaning system, it is assimilated, and if beliefs about supernatural agency are already in place, then the event can be perceived as miraculous (Parkes 1975, 1993; Joseph and Linley 2005). For example, if someone's meaning system includes the notion of an active, powerful, and good God who will do what you ask, and if that person's loved one gets well from a disease after God was asked for a cure, then the event can be assimilated into the existing system and be attributed miraculous properties: "God performed a miracle in curing my loved one when I asked God to do so." What greater confirmation of the truth of one's faith could one ask for?

However, the incoming information may be too discrepant from a person's global meaning, making assimilation impossible (Janoff-Bulman 1992). In these instances, the event or stimuli is so incongruent with one's beliefs that a radical overhaul of one's meaning system occurs. This type of meaning making, in which people change their global beliefs or goals, has been termed *accommodation* (Parkes 1975, 1993; Joseph and Linley 2005). For example, someone who claims no religious beliefs may see the spontaneous remission (cure) of an advanced cancer and, as a consequence, overhaul his or her global beliefs and account for this event as a miracle performed by God.

The preceding illustrations show that when a person perceives an event as a miracle, he or she is attributing the event to a special nonordinary, counterintuitive causal process. For most day-to-day events, it is not necessary

to invoke such attributions because on most days, people do not encounter the unusual sorts of events that would prompt them. Thus it seems that attributions of miraculous processes are most likely to occur when (1) a person comes preset to interpret events and the world in that way or (2) the event one encounters is sufficiently discrepant with what one ordinarily expects that one is pressed to arrive at a miracle attribution.

NEUROPSYCHOLOGY

Much of this attributional process can be traced to a neurological level, where there are neural substrates and operations that lead individuals to construct meaning and miracle attributions out of counterintuitive information. Currently there is no unifying, neuropsychological theory for miracle attributions, largely because they are difficult to operationalize and because very few empirical studies have looked at miracle attributions per se; rather, there are converging lines of evidence from related fields that make it reasonable to implicate similar neural processes in the process of making meaning out of events that are deemed miraculous. For example, neurophysiological studies show increased activity of specific regions of the brain during meditation and other spiritual practices (Azari et al. 2001a, 2001b; Newberg et al. 2001). Granted, meditation and spiritual practices are different than ascribing an event to the category of a miracle. But there are likely attributional processes involved in these activities, which suggests that similar studies may help point to preexisting cognitive structures that mediate our interpretation or attribution of events as miraculous.

In a sense, miracle attributions are not a dramatic departure from, but a predictable by-product of, ordinary cognitive function (Boyer 2003). Interpretations of what we perceive as unordinary may therefore be mediated by relatively ordinary mental and neural mechanisms. One of the particular mechanisms involved seems to be an agency-detection and multilevel attribution processing model for making miraculous meaning of an event. More directly, counterintuitive information likely triggers an innate and naturally selected single agency-detection system (Barrett 2004), which is trip-wired to respond to fragmentary information, inciting inferences of miraculous processes (Atran and Norenzayan 2004).

A quick overview may help before unpacking the details of the model. When the brain is confronted with counterintuitive information, it experiences a state of arousal. This hyperalertness activates the prefrontal cortex (PFC), which distributes the release of the excitatory neurotransmitter glutamate, which in turn stimulates the thalamus. Stimulation of the thalamus, however, inhibits or blocks communication with the posterior superior parietal lobule (PSPL), so that the brain cannot analyze and integrate higher-order sensory information (Newberg and d'Aquili 1998, 2000). The brain is

left to interpret the information according to preexisting schemas that likely reside in the memory systems of the temporal lobe. For those with schemas that lean toward miracle attributions, the brain may make meaning out of the counterintuitive information by ascribing miraculous properties to it. Notably, this is only one potential model that does not likely encapsulate every method or approach by which events are interpreted as miraculous; however, it may help to focus on each stage of this neuropsychological model as a way of understanding some of the potential mechanisms involved in imparting events with meaning through miracle attribution.

Detection of Counterintuitive Information

As this synopsis suggests, the first stage in the neurological model involves detecting and responding to ambiguous and counterfactual information. By its nature, miraculous meaning is counterintuitive. It does not immediately make sense given one's knowledge of natural processes and what one expects under normal conditions. As Leif Enger (2001, 3) says in his best-selling book, *Peace Like a River*,

> Miracles bother people, like strange sudden pains unknown in medical literature. It's true: they rebut every rule all we good citizens take comfort in. Lazarus obeying orders and climbing up out of the grave, now there's a miracle, and you can bet it upset a lot of folks who were standing around at the time. When a person dies, the earth is generally unwilling to cough him back up. A miracle contradicts the will of the earth.

Unusual events, therefore, do not pass by unnoticed, but rather arrest our attention at a perceptual level: visual, auditory, or tactile. The increased attention garnered by such counterintuitive information leads to some elevation in arousal. This hyperarousal stimulates the autonomic nervous system (ANS), the portion of the nervous system that elevates heart rate, blood pressure, respiration, and oxygen metabolism when confronted with unusual or arousing stimuli. When something enters the mind through the senses that is not rational or logical, whether this is because it violates the law of nature (Hume, as cited in Pojman 2001) or because we expect all things to operate according to certain rules or sequential orderings (Atran and Norenzayan 2004), neural signals are sent off to activate the ANS. This may happen particularly when the left-sided and rational side of the brain becomes frustrated and triggers a limbic response (Johnstone and Glass, forthcoming).

Studies have found this to be true with many kinds of counterintuitive information, and it may apply to miracle attributions. We have emotional and physiological arousal to shadows, to rivulets and clouds that form distinct patterns, and to things that appear to occur via magic. The mere exposure to death scenes can activate adrenaline and lead to an increased belief in

God's existence and miraculous intervention (Atran and Norenzayan 2004). Even babies who are shown unexpected phenomena in which universal assumptions are violated display surprise by looking at the stimuli longer than at something more commonplace (Spelke 1991; Spelke, Phillips, and Woodward 1995). Perhaps this is why the ANS is so heavily involved in religious rituals and spiritual meditation (Newberg, d'Aquili, and Rause 2001). Each of these spiritual or religious events elicits changes in heart rate, blood pressure, and breathing. It is not exactly clear why this happens, although Newberg, d'Aquili, and Rause (2001) suggest that it may have something to do with an alteration between the sympathetic and parasympathetic branches of the ANS, with the former being the arousal system that surges in situations of intense readiness, and the latter designed to maintain homeostasis and balance. They normally operate in antagonistic fashion, but in cases of spiritual hyperarousal, the resulting excitement may overwhelm this antagonistic reaction and result in altered states of consciousness. The same may be true in some cases of events and stimuli that we interpret to be miracles.

There is also a strong emotional tone to the sensations and perceptions that we call miracles, which reflects involvement of the limbic system. Events that are deemed to be miraculous can arouse emotions of joy, shock, relief, or fear. This may partially explain why psychedelic drugs, or entheogens, result in spiritually based perceptual alterations of actual objects. These drugs may activate limbic structures involved in signaling the significance and emotional tone of events, thereby facilitating religious types of experiences (Hood 2005). Perhaps the limbic system and the ANS work together to create a salient emotional experience in response to counterintuitive information. In a way, miracle attributions may in part arise from a greater or lesser degree of anxiety and activate mechanisms that automatically respond to situations of uncertainty.

Sensory Interpretation

One of the particular mechanisms by which we respond to this arousal and deal with this counterintuitive information is by imposing agency and causality. When the brain detects sensory information, it engages in a process of interpretation to understand and assign meaning to that information. According to Atran and Norenzayan (2004), the brain is wired with an agency-detection mechanism that is ready to be triggered by ambiguous information as a way of imputing causality to events. This agency-detection mechanism is likely to be dependent on the neurocognitive networks in the frontal lobes, particularly the PFC (McNamara 2001). In addition to mediating planning, goal-directed behavior, social inhibition, and insight, the PFC is responsible for agency detection and attributing independent mental states to oneself and

others. Its dense interconnection with several limbic sites and its diffuse projections throughout the brain allow it to regulate emotions and output to other cortical regions, and global cortical arousal levels. As the last region to develop in the brain, both in terms of brain evolution and human development, the frontal networks house our intentionality detector, enabling us to assign intentional states to animate objects. These networks also control our theory of mind, namely, the process by which we attribute complex mental representations of intentional mental states (thinking and believing) to other agents and persons.

This is readily apparent among those with frontal lobe deficits, in which damage or perseveration of agency is readily apparent. For example, those afflicted with Capgras syndrome erroneously cling to beliefs regardless of evidence to the contrary, like a patient believing his wife has been duplicated and is an imposter, despite all contradictory testimony. Similarly, those with temporal lobe epilepsy often report spiritual experiences that are related to increased cerebral blood flow in the frontal regions that control how we attribute mental states to self and others (Azari et al. 2001a, 2001b; Newberg et al. 2001). Even among those without frontal syndromes, activation of the frontal lobes has been implicated in religious events (Azari et al. 2005). During meditation, there appears to be increased frontal activity on positron emission topography imaging (Herzog et al. 1990–1991), and single-photon emission-computed tomography imaging with Franciscan nuns and Tibbetan monks has revealed increased activity and blood flow in the dorsolateral and dorsomedial prefrontal cortex (Newberg et al. 2001, 2003). Therefore the increased activity of the frontal lobe during spiritual experiences, paired with its role in agency detection and causal attribution, suggests a role in the attribution of miraculous processes. Perhaps the perception and interpretation of an event as miraculous is partially an artifact of the frontal lobe tendency to anthropomorphize novel events or objects.

However, other areas besides the frontal networks may also be involved. One possibility is that miracle attribution occurs along a frontal-parietal-temporal circuit. In addition to increased frontal activation, the preceding imaging studies also demonstrated decreased activation of certain regions of the parietal lobe such as the right posterior superior parietal region (Herzog et al. 1990–1991; Newberg et al. 2001, 2003). The posterior superior parietal lobe (PSPL) is involved in the analysis and integration of higher-order visual, auditory, and somaesthetic sensory information. Decreased activity in this area may allow for more transcendental experiences by minimizing the abilities of the PSPL such as decreasing one's awareness of the self relative to other objects (Johnstone and Glass, forthcoming). There may be a softening of the sense of self and absorption into a larger sense of reality, so that one is better able to view counterintuitive information through a whole or gestalt. Maybe, as Newberg and d'Aquili (1994) suggest, miracles are based on a

process that involves increased physiologic activity of the prefrontal cortex and decreased activity of the posterior superior parietal regions.

The precise mechanism by which these areas get activated or inactivated is less clear. Based on the work of Newberg and d'Aquili (1998) as well as Johnstone and Glass (forthcoming), one possibility is that for those making miracle attributions, the hyperalertness that follows from arousing information may activate the PFC. The PFC may then distribute the release of the excitatory neurotransmitter glutamate, which in turn stimulates the thalamus. The thalamus governs the flow of sensory information to cortical processing areas and provides the PSPL with sensory information.

When this sensory information is counterintuitive, however, the reticular nucleus of the thalamus may release the inhibitory neurotransmitter gamma-aminobutyric acid (GABA), which inhibits neuronal communication with the PSPL, so less sensory input is received by the PSPL (Destexhe, Contreras, and Steriade 1998). In a sense, there is deafferentation, or blocking, of the PSPL via GABAergic effects (Newberg and d'Aquili 1998), so that the brain regions that are active in the usual processing of sensory interpretation are in fact inhibited. Because the PSPL is deafferentated, the brain is left to interpret the information according to preexisting schemas that impose meaning. Put differently, the brain must rely on previously used methods of interpretation to create a meaningful explanation. It is at this point that the temporal lobes may be activated to provide archetypes and templates for meaning.

This is similar to what happens with visual hallucinations. Often, as in the case of those with Parkinson's or Lewy Body dementia, there are structural abnormalities in the primary visual pathway that prevent the inhibition of visual events (Atran and Norenzayan 2004). When these visual areas are deafferented, the brain is forced to interpret any random neural activity in the visual pathway, resulting in visual hallucinations. Typically, the final image blends internal and external elements from fantasy and memory, which likely reflects temporal involvement in the final stage of forming a miracle attribution.

Miracle Attribution

As this suggests, when the natural process of interpreting sensory information has been inhibited, the brain must rely on other things, such as schemas and context-dependent memory, to make meaning out of the counterintuitive information. With the minimization of right parietal functions, there may be increased activity of left temporal regions that house universal religious archetypes and schemas. These schemas are template-like representations of highly complex cognitive systems of knowledge. The particular cluster of schemas that exist in a person's mind can influence the nature and

sensitivity of the perceptual sets that a person is capable of having. To reconcile and explain all sensory information, we engage in a process of schema-fitting, which involves actively searching through all our schemas to find the most appropriate template or lens for understanding the sensory information in question.

Although it would be an error to say that religion is a schema (Paloutzian and Smith 1995), there are many specific religious schemas that shape our response to everyday events, for example, an Evangelical Christian schema, an Orthodox Jewish schema, a Muslim schema, a Buddhist schema, and so on. Likewise, someone whose schema allows for a predisposition to see special, unique meaning whenever an unexpected event occurs is more apt to make an attribution to the miraculous. This type of schema for miracles is influenced by culture and religious belief systems, typically emerging as children age and form templates for detecting supernatural agency (Boyer and Walker 2000). These schemas may also be adaptive because they allow us to better anticipate outcomes and develop predictable responses (Brown and Caetano 1992). In a sense, because miracles challenge our knowledge of natural processes, the ability to refer to supernatural intervention and agency may offer the emotional benefits of conferring meaning and predictability on the apparently miraculous event.

On a neural level, the activation of these schemas may partially reflect increased temporal lobe activity. In particular, the left temporal lobe may be the primary location for the generation or experience of religious archetypes (Johnstone and Glass, forthcoming; Newberg and d'Aquili 1994). The left temporal lobe system has been implicated in cases of spiritual phenomena such as increased left temporal blood flow in religious delusions (Puri et al. 2001) and hyperreligiosity and religious conversions among those with temporal lobe epilepsy (Bear and Fedio 1977). This increased left temporal activity may activate universal religious archetypes that are shaped by one's culture, particularly when explanations are needed for counterintuitive information. Considering the link between the temporal lobes and memory, it also ensures stronger recall of counterintuitive events as well as a greater likelihood for relying on similar attributions and archetypes in the future. We recall and recognize counterintuitive information better than other events due to their attention-grabbing quality (Barrett 2004; Boyer and Walker 2000), and it may be that people who readily attribute an event as a miracle have learned contextual cues for doing so, therefore increasing the likelihood of seeing a miracle (Richardson-Klavehn and Bjork 1988).

Put simply, the brain appears to have particular ways of dealing with information that violates natural laws. An attribution to miracles may be a heuristic or mental shortcut that is a by-product of a hair-triggered agency-detection mechanism. The vision of Mother Theresa in a cinnamon bun, for example, may represent culturally conditioned priming in anticipation of

agency (Atran and Norenzayan 2004). In a sense, we may conjure up the miraculous due to a trip-wired cognitive schema for agency detection when we are confronted with uncertainty.

Putting It into Context

Perhaps an example would be helpful to illustrate this model. Let's say that someone becomes lost while driving in a winter storm. Suddenly, she sees the taillights of a vehicle ahead of her. She immediately experiences relief and is able to safely follow the taillights to her precise destination. But when she gets to her destination, the vehicle suddenly disappears. One possible explanation, depending on her selection of schemas, might be miraculous intervention. On a neural level, when she reached her destination and did not see the other vehicle, she experienced arousal of the ANS and limbic system due to the counterintuitive nature of the information. Her heart rate, respiration, and blood pressure most likely elevated, and adrenaline was released to the temporal lobe, heightening recall. Her frontal lobe, particularly the PFC, was then activated as a way of trying to determine agency and causal attribution. Although her PFC likely stimulated her thalamus, the counterintuitive nature of the information may have blocked the supply of GABA to the PSPL, thus inhibiting her normal methods of sensory interpretation. Forced to rely on schemas and contextual cues for understanding, she may have made meaning out of the event by attributing it as a miracle.

Again, this says nothing about the veridicality or truthfulness of her attribution and interpretation, but instead demonstrates some of the possible neuropsychological substrates underlying miraculous perception and attribution. As with all working models, it is undoubtedly insufficient to explain every case where meaning is made out of events we deem as miraculous. Many of the aforementioned scientific studies were based on a circumscribed number of individuals, with research questions that were not explicitly intended to be ascribed to the neuropsychological process of miracle attribution. This model is also based on certain assumptions such as the arousing nature of counterintuitive events and the immediacy of the attributional process. It may best apply to those situations when counterintuitive information incites arousal and emotional excitement as well as those cases when there is relatively close timing between the experience of the events and the actual interpretation of the events as miraculous. The elements and sequence of neurological activity may not adequately capture those occasions when events are initially experienced and only interpreted as a miracle years later. Regardless, it seems clear that an integrative approach that combines the knowledge bases of social and clinical psychology, cognitive psychology, and neuropsychology helps us to understand more fully how the human

perceptual system makes miracles out of events by attributing those events to the operation of miraculous processes. Perhaps this can open greater dialogue about what is ordinary in our interpretation of the extraordinary.

NOTE

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1. See Park (2005b, 297) for an excellent diagram that summarizes the basic processes by which incoming information is assessed and, if necessary, reconstructed.

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CHAPTER 5

What Is a Medical or Therapeutic Miracle?

Myrna M. Pugh

Miracles defy the odds, the imagination, and the laws of nature. Medical and therapeutic miracles have been documented since the earliest history of humankind. The biblical records are replete with miraculous events in both the Old Testament (OT) and New Testament (NT). Furthermore, they are still happening today, even within the context of modern medicine. Miracles have not disappeared.

Miracles are extraordinary occurrences that surpass all known human powers or natural forces and are ascribed to a divine or supernatural cause. According to John T. Driscoll, as written in his article for *The Catholic Encyclopedia*, miracles are said to be (1911, para. 12) "supernatural, that is, above or apart from, the order usually observed in nature." C. S. Lewis, in his book *Miracles*, described miracles as (1947, 5) "an interference with nature by supernatural power." Miracles are a language of powerful literal and symbolic communication that one understands but that cause one to feel a sense of wonder. Just as the cosmos speaks its own language, so do miracles. Psalm 19:1–4 speaks to us concerning the voice of the heavens: "The heavens declare the glory of God, the skies proclaim the work of his hands. Day after day they pour forth speech, night after night they display knowledge. There is no speech or language where their voice is not heard. Their voice goes out into all the earth, their words to the ends of the world" (NIV). Miracles and nature alike speak to the character and the nature of God. Sometimes they shout in a loud voice; at other times they murmur softly. At all times and in each circumstance, they speak to us, calling us to listen to something that God has to say. Miracles are vivid word pictures of

God's intentions, love, and interaction in our lives. They also speak the doctrine of Christ. Miracles testify to the truth of Christ's ministry. They are all about life and redemption, as the ministry of Christ was all about life and redemption. For example, the miracles of Christ raising three dead people are graphic representations of Christ's raising of millions of those dead in sin, of new life in Christ. Miracles are also prophetic; that is, they speak about events of the future.

Miracles are somewhat like a state of genesis. Whenever we experience a medical miracle, we are, to some extent, experiencing genesis, that original state where everything is new and fresh. This is not ex nihilo creation, that is, something created out of nothing, but it is creative in the sense that something is revealed that was previously unknown to us. That something is the phenomenon of miracles. The miracle itself is the *noumenon*, or the actual event or experience. This may or may not be recognized by observers. The effect of the event or experience is what others may see, hear, feel, or in some other way understand or experience. This is the *phenomenon* of the miracle. Jesus spoke of this when he was instructing Nicodemus of the spiritual things. He used the analogy of the wind and its effects. He said, "The wind blows wherever it pleases, but you cannot tell where it comes from or where it is going" (Jn 3:8, NIV). In other words, you can tell where the wind is blowing because you can see the trees bending, but you cannot see the wind itself. This is true with miracles as well: we can see the results, but we do not usually see the actual miracle itself.

When miracles do occur, there is fresh creative power at work, bringing us back to our roots of origin, renewing and refreshing our souls. Miracles take us back to a time when we knew more and were closer to that other world of the spirit, which surrounds us, but of which we are only vaguely aware. We do sense that there is something more to our existence than this life only, if we could just break through the curtain, the veil that obscures our view. We dimly understand that there is an otherworld, but it is difficult to access. Access is possible only through the spirit.

We experience the otherworld through a shimmer, an undulation of energy, matter, time, and space. This otherworld is a living, active, and interactive thing, intruding at times into our side of reality. This otherworld tantalizes us with its promises and occasional glimpses of what awaits us on the other side. Miracles are a part of that otherworld. It is as though there is a slight rupture or a parting of the curtain that serves as a boundary into this spiritual realm. They are temporary protrusions of eternity poking through to our side. Miracles are God's way of telling us, "I see you, I care about you, I am with you." Miracles are divine attention, usually happening at a time when we are in a desperate situation or extremely ill. It is at those times when we are most vulnerable to the actions of that otherworld that we experience what we call miracles.

While medicine operates at the cellular, chemical, physiological, and neurological levels, miracles appear to bypass these processes with ease. It is as though built-in rules coded into the pattern of creation are held in abeyance, or perhaps nature comes with an override on them. A medical miracle, then, is an event that, on the natural face of it, ought not to have occurred. The biological and natural schematics that govern our behavior, development, operation, and sustaining actions are modified or set aside, either temporarily or permanently, in an action that runs counter to both expectation and training. Medical miracles stop us in our tracks, they bring us up short, and they cause us to reconsider what we know and think.

Medical miracles then, are specific events that take place in the lives of individuals and that fall outside the realm of the normal; that is, they do not conform to regular patterns of behavior, or understanding, of natural law. The teaching of the Catholic Church regarding the purpose of miracles is that they are the "manifestations of God's glory and the good of men" and that they "confirm the truth of a mission, a doctrine of faith and morals, to attest the sanctity of God's servants, to confer benefits and vindicate Divine justice" (Driscoll, 1911, para. 19). Miracles are designed and intended specifically to bring glory to God.

Miracles can occur in any area of medicine and have been documented as occurring in numerous medical venues. Medical miracles have been experienced in ophthalmology, dermatology, internal medicine, trauma, and obstetrics, to name just a few, and we see miracles of transplantation and resurrection.

In what context do miracles occur? Miracles do not happen in a vacuum. There seem to be some prerequisites for a miracle to occur. First, there needs to be a situation where helplessness and hopelessness prevail. The recipient faces an obviously overwhelming situation and is incapable of getting through it unaided. In other words, there is a real need for some sort of intervention from outside the normal range. Miracles are sometimes accompanied by the presence of angels; other times, they are not. At this time, the recipient is open to previously undiscovered resources both inside and outside himself or herself. The recipient may become aware of some kind of spiritual activity on his or her behalf. This is an opportunity for God to intervene in the recipient's life. Miracles are gifts from God and must be received, and not demanded. However, they can be, and often are, solicited by prayer. Often, miracles happen after a clear cry for help directed to God.

There is a certain aura of mystery surrounding miracles. They seem to fall under the larger umbrella of spiritual and intellectual mysteries that reach far back into the ancient past. Now, we all love a good mystery. A mystery is something to solve, to understand, to unravel, to get to the bottom of; it has intrigue. We sometimes approach miracles in much the same way. We desire to know the details, the who, what, how, where, when, and most of all, the

why of miracles. We are curious about them, but at the same time, we also tend to want to demystify them, to defrock them, or to explain them away. Some people seem to have a primeval fear of miracles at some deep, unconscious level, perhaps because we do not understand them and because they are outside of our control.

Miracles call us back to another time and place, where we have no collective recollection of such things as the creation of the universe, the Garden of Eden, man's original sin, or events that happened millennia ago. These feel like only dark shadows to us. These enduring mystical concepts drive our deep attraction for, and our accompanying underlying fear of, miracles.

Miracles are far outside the boundaries of our power and control and thus may feel dangerous and somehow suspect. They remind us of our limitations and boundaries. They push us over the abyss of known reality into the depths of faith and mysticism. These are places where we feel intellectually, spiritually, and emotionally uncomfortable. With the rise of modern medicine and its rapidly advancing technology and emphasis on research, testing, pharmacology, and predetermined results, we have become insensitive to the supernatural and have lost our sense of wonder and awe in the presence of what might be genuine miracles. Miracles have a long history of subjection to examination, dissection, review, reductionism, and even outright denial and ridicule.

The rise of humanism brought about a movement to discredit miracles and the supernatural. Philosophers such as Spinoza, Hume, and Kant have postulated that miracles cannot and do not happen (Geisler 2002). They cite theories of evolution and logic, and they use unsupported evidence from the distant past to shore up their claims. However, their arguments are long on speculation and short on convincing evidence that miracles do not happen. Most of their arguments center on the premise that miracles are nonrepeatable events and therefore cannot be either duplicated or authenticated. The philosophical framework that undergirds their ideas is called *uniformitarianism*, that is, the idea that natural processes in the present were also in operation in the distant past and that nothing has changed in the meantime.

This premise is central to the whole concept that science acknowledges only what is repeatable and verifiable. This is a weak argument at best. Many events in the distant past are not repeatable, nor are they verifiable, such as the creation of the universe or the origin of humans on earth—not to mention the ancient catastrophic events on this planet, which, according to Whitcomb and Morris (1961), would account for phenomenal changes in the appearance of the earth and the manner in which it responds to those changes. This would include changes in the way in which geochronology information, including radioactive disintegration, is recorded and understood.

According to the argument of the naturalist, the universe is the result of a gigantic explosion, which set all things into motion. Science has pretty much

demonstrated the grounds for this big bang theory, yet we are still struggling to verify the founding principles of the theory and its consequences. The problem arises from the origin of the gas, dust, and unique particles needed to form the universe. No one can say with certainty where this primordial material came from. This event is unlikely to be repeated, and we certainly have not experienced anything like it since. Nonetheless, many deny the possibility of miracles because, by their very nature, they are elusive and difficult to verify, except to those who have experienced them.

Because of our modern critical methods, we are more skeptical of miracles and less inclined to accept them as real than did earlier generations. While we struggle with the question of whether miracles are real, sturdy work continues to be done on understanding the dynamics at work in the miracles of Jesus. What made it possible for Jesus to perform his miracles? Brock Gill and Andrew Kale, both of whom are magicians and illusionists, tried to duplicate Christ's walking on water, feeding of the 5,000, and raising of the dead. They did a fair amount of research as to how the miracles could have been done. They visited the sites where all three miracles took place. They went to the village of Nain, located close by the Golan Heights, somewhat south and west of Nazareth, where Jesus raised the dead son of a widow. They also went to the site, not far from the Sea of Galilee, where Jesus fed more than 5,000 people. In addition, they visited the area where, it is believed, Jesus walked on water.

Some scholars, such as Larry Hurtado, thought Jesus might have performed the miracles through the medium of mass hysteria. However, according to Archie Horst, another biblical scholar, only 10 percent of any group of people are susceptible to this phenomenon, and he felt that it would not be possible because there were too many distractions such as children at play and demanding care from parents and friends. The conditions would not have been right for mass hysteria (BBC Worldwide Americas 2006).

They were unable to explain the miracle of Jesus raising the dead man and Christ's walking on water. Perhaps the man was only in a deathlike coma? There are, in the region, substances (scopalamine and atropine) extracted from the mandrake plant that can put a person into a coma. These agents are used today in surgery to anesthetize patients. There were no antidotes for the poison at that time (Mandrake Officinaris 2005). This excluded any possible explanation for this miracle. Simon Gaither says there are no rational explanations for the miracles of Jesus. He states that they cannot be duplicated. He believes they are not hysterical, nor were they an illusion, a fake, or magic. He says they are ministries of divine purpose (BBC Worldwide Americas 2006).

Medicine, especially conventional Western medicine, is, by its very nature, limited in scope and depth and by the specifically and narrowly focused science that drives it. Medical miracles operate outside the limits,

understanding, and capabilities or scope of either the ancient or modern medical models governing conventional medical procedures, controls, and outcomes. Miracles demonstrate their presence in the realm of the seeable, doable, and knowable, coming apparently from another realm—that of experience and faith—that is difficult to describe and document.

Some of the opposition to miracles may stem from the philosophical differences that saturated Old World values of what constituted a life worth living. In the ancient world, the perception of life was somewhat unlike the quality-of-life values we practice today. To illustrate, in his *Republic*, Plato remarked, regarding setting up the ideal state, that "you will establish in your state physicians and judges such as we have discussed. They will look after the citizens whose bodies and souls are constitutionally sound. The physically unsound they will leave to die: and they will actually put to death those who are incurable or corrupt in mind" (Book IV, lines 1–5).

While this fatalistic view of life was widespread, another, more recent camp has emerged that embraces not only the possibilities of miracles, but that claims to have seen, and continues to see, miracles occur routinely. This is the charismatic movement, which has exploded in both Protestant and Roman Catholic churches within the last 100 years. In fact, this charismatic movement has caused the breakdown of some barriers between the two movements. In the last quarter of the twentieth century, there was more communication between the Catholics and Protestants than ever before. This reflected positive changes in philosophical paradigms within these major religious groups (Prather 1996).

In the Bible, supernatural events are reported throughout. Both OT and NT describe in vivid detail the miraculous events that took place over millennia. Prophets, such as Elijah, performed miracles like the raising of the dead (1 Kings 17:17–24). Miracles were almost everyday occurrences in the lives of some of these holy men. Elijah's successor, Elisha, performed similar miracles over his lifetime such as the raising of the dead (2 Kings 4:32–35) as well as healing Naaman, the military general of Aram, of leprosy (2 Kings 5:14).

This chain of miracle-working prophets worked down through time, until the appearance of Christ, who was, some believe, the greatest miracle worker of all time. Miracles of healing, such as curing blindness (Mt 21:29), curing leprosy (Mt 8:1), resurrection (Mt 9:18–26), and the casting out of demons (Mt 15:21–28, 17:14–21), were commonplace for Jesus. It is said that multitudes sought him out and were healed of diseases of all kinds (Mk 1:29–34). It is interesting that even those who considered themselves enemies of Jesus did not deny that he worked miracles. In fact, one of the charges brought against him by the Jewish religious leaders to the Roman courts was that he performed miracles every time he was in public. These charges contributed to his death by crucifixion. It was a stunning medical miracle when Jesus resurrected from the dead three days later. His miraculous resurrection

resulted in the frustration of the Jewish and Roman authorities alike. Once God had empowered the remaining core of believers at Pentecost, not only did his disciples go on to do many of the same miracles that Jesus did, but those who call themselves believers are authorized to do the same today (Lk 9:2).

If we understand and acknowledge that the same supernatural precepts are still in operation today, we would not only accept miracles as a natural part of our lives, but we would expect them to happen. In the case of miracles, natural laws are set aside, while new supernatural laws are inserted in their place. This does not mean that old laws have been set aside for all, but only on a case-by-case basis. People survive trauma when they ought not. Live tissue grows where there are only dead cells. Nerves regenerate in an environment that is unresponsive or nonexistent. Infections that persist in the presence of antibiotics are unexpectedly reversed. Sometimes body parts are regenerated out of bone and skin (Wilson 2002), and people are still being raised from the dead (Tari 1971). Evangelist Smith Wigglesworth (1999) was well known for the miracles he performed all over the world. He performed the same kinds of miracles one reads about in the scriptures. Healings, deliverances, resurrections, transplantation, and other miraculous events were common in his ministry for many years. He is acknowledged as one of the pioneers of the modern-day Pentecostal movement, and his ministry is well documented. In London, Wigglesworth prayed for a 26-year-old man who had never walked. After the prayer, the man leaped to his feet and ran around the room. He was completely healed (Wilson 2002). Wigglesworth did not believe in partial healings. One was either totally healed, or he was not healed at all.

Wigglesworth viewed sickness as the result of evil spirits torturing people. He was uneducated and virtually illiterate. His wife, Polly, taught him to read in his mid-twenties, and he never read anything but the Bible. He was a man of unusual faith, whose message consisted of only three topics: salvation, faith, and healing.

Many people have performed remarkable healings and miracles over the past 100 years. This list includes not only Wigglesworth, but also Aimee Simple McPherson, Kathryn Kuhlman, and others. The list grows exponentially when one considers the miracles that have taken place at Lourdes, France, Medjugorje in old Czechoslovakia, and other sites such as Guadalupe, Mexico, where miracles have occurred in the past and, some say, are still occurring today.

A huge proponent of miracles and healing was Oral Roberts, who established a notable medical school in Tulsa, Oklahoma—the site, as well, of the alternative healing Cancer Center of America (see Cancer Treatment Centers of America 2007; ED Ref College Search Directory 2007). It uses state-of-the-art medical techniques, combined with natural and complementary medicine, along with the practice of faith and miracles.

Out of almost nothing but miracles, Mark Buntain built a hospital with a nursing program in the poorest part of Calcutta, which is now a large medical facility with advanced technology and modern medical services for the entire city. It is a medical haven for rich and poor alike. Here they also feed and educate the thousands of poor children of Calcutta daily. Miracles take place on a daily basis in this place. The ministry could not survive apart from miracles. Mark was the most humble man I had ever met. He was in constant communication with God, weeping over those in distress and praying for healing and deliverance. I observed a number of medical healings take place in Denver, Colorado, at Calvary Temple, when he came from Calcutta to attend a conference there.

I had the pleasure of meeting one of the recipients of Mark's ministry a few years ago. I attended a writing seminar in Phoenix and sat beside the speaker and his wife at lunch. We were discussing his childhood, and, as he was telling the story of how his pastor prayed for and received the land for the church, hospital, and schools, I asked, "We are discussing Mark Buntain, are we not?" His jaw dropped, and I explained to him that I had supported the ministry of Mark Buntain for many years. I remarked that it was very uplifting for me personally to meet someone whom he had directly helped.

I have had the unique pleasure of meeting Demos Sharkarian, a man of unusual humility and founder of the Full Gospel Business Men's Fellowship International. He crossed the country, holding meetings to which many people came for healing. I have seen a number of people healed of various kinds of disabilities and sickness at these meetings.

During the 1970s, a revival swept across Indonesia. It began in Timor, a small island in the chain of islands that make up the country. Mel Tari (1971) recounts how that revival changed his land. The people of Timor were simple, mostly uneducated people. However, they had a unique quality: they believed the Bible quite literally. They went about performing miracle after miracle, turning Communion water into wine. In the Amfoang district, a local team of evangelists attended the funeral of a man who had been dead for two days. Over 1,000 people came to his funeral. The team gathered around him and prayed for his recovery. The dead man sat up and began to tell the people at his funeral all about heaven and hell. The entire village became believers.

One of the most recent and most well documented miracles is that of Duane Miller, who suffered a total loss of his voice due to a virus. Duane was the pastor of First Baptist Church in Brenham, Texas. He was also a soloist, having sung for many years. His doctors recorded his journey from the beginning to the end. There are pictures, chart notes, X rays, and other records. His voice box was completely rigid due to extensive scarring. For three years, he could not speak. Then, at last, he was able to use a microphone to increase his whisper of a voice. One Sunday, he was teaching as a substitute in a Sunday school class. The class was recorded. One moment,

he was struggling to make himself heard and understood, and the next, he was speaking in a normal voice. There has never been an explanation for his spontaneous recovery (Anderson 1998).

Science and religion intersect at many points in our quest to understand medical miracles. They are not completely opposing forces or concepts, even though many people seem to choose sides, staking their claims in one or the other of these equally powerful paradigms. Science has its roots embedded deep within religion. Religion is the mother of all the sciences. In the past, most physicians were also clerics or philosophers by nature and training. It has been only within the last 200 years or so that science and religion have diverged. Happily, both sides are showing hopeful signs that they are in the beginning stages of coming back together once again. Science is now beginning to embrace some previously discarded portions of itself such as the integration of faith and prayer into medicine. Those who are ill are going to reap the benefits of this new marriage, and many already have done so.

In ancient times, every culture was shaped largely on the basis of oral tradition, and miracles were part of the warp and woof of those cultures. Children learned about them in infancy. They became an accepted part of a people's history. Each culture had its miracle workers, and some of them, like the magicians Pharaoh employed, were able to duplicate most of the minor miracles that Moses performed (Ex 7:10–11). Magic and sorcery were important components of life then. It was not until the time of the NT that there developed a clear distinction between sorcery or magic and the miracles of the early church. In fact, some people thought that Jesus performed miracles through magic or sorcery (Mt 9:34). It became a very real step of faith for them to believe and acknowledge that those miracles were from God alone.

Science, as we know it, is dedicated to knowing all about natural laws. Scientific thought seeks to align itself with what it can observe, duplicate, and document. Natural laws, then, become the primary driving force for the practice of medicine in its various forms. Medical advancement is constructed on the foundation of natural laws. This does not mean that medicine is static, for it is not. It is in a continual state of flux. New information is constantly emerging from, and entering into, research and development of science. It is not a closed system. Change is both expected and accepted. What we knew 30 years ago about a procedure, drugs, or how the body operates is old news now. The practice of medicine is rapidly evolving, not only from year to year, but also from hour to hour. My husband went to medical school in the late 1960s and early 1970s. He practiced medicine under harsh conditions and used equipment and techniques that are obsolete and outdated today. In every generation, medical education, scientific advances, technology, and pharmacology outpace the practitioner quickly.

Forty years ago, diabetes was a death sentence. Today, diabetics can live normal lives. Hemodialysis was a primitive and complicated chore, requiring one to follow exact directions to build a single-use artificial kidney, which then required the greater part of an entire day to process blood and remove toxins. Today, dialysis takes place in the home, or even on vacation, using a fraction of the time and space of old, outdated equipment and procedures. Better yet, if one can locate a matching organ, a kidney or liver transplant is almost commonplace today, as are heart-lung, or even multiple-organ, transplants. Almost any body part can be transplanted using technology and techniques that were unheard of a few years ago.

Truly advanced medical marvels are available to treat many diseases and conditions that would have meant certain death even a decade ago. Costs, of course, sometimes prevent the treatment or research to reach the neediest patients. I recall a case where a young man with whom I was acquainted had an astrocytoma brain tumor. In Denver, a pilot program employed an advanced new tool, called a *gamma ray gun*, to treat these very difficult tumors with some success. His insurance company refused to approve this new procedure, and the young man died. Today, this procedure is done routinely and paid for by insurance companies.

The role of religion in the healing arts has been redefined by the rapid advancement of modern science. This has led to a sense that miracles are obsolete. Who needs a miracle, when we can take a drug or have surgery to correct a defect or problem? There is some logic for that line of reasoning. Could it be that God has allowed modern medicine to replace the need for miracles? Surely it is a gift of God in answer to the prayers of God's people in all the anguished, endless ages of human suffering, calling out to God for deliverance. It makes a difference what one means by *miracle*.

The rapid advancements in pharmacology, surgical techniques, genetics, and the understanding of how organisms operate have changed the way we approach the practice of medicine. New fields of medicine are being developed every day. Oakley Ray (2004) of Vanderbilt University is an expert on how the brain influences health and behavior. He claims that knowing how the brain influences people's health and susceptibility to illness can bring important changes to the health care system. Understanding how the mind, the endocrine system, the nervous system, and the immune system interact is crucial in helping people conquer the stress and illness in their lives.

To this end, and addressed by Gaztambide in volume 2, chapter 7 of this book, neuropsychology has married immunology and has given birth to a child called *neuropsychoimmunology* (Ray 2004). This field, although fairly young, brings various disciplines together that are geared toward understanding the mind-body connection that results in a strengthened immune system. It employs techniques that were formerly part of the field of psychology and moves

them into a new arena of medicine. Techniques such as biofeedback, massage therapy, hypnosis, and self-hypnosis as well as guided imagery have gained new acceptance in mainline medicine.

In addition, other, more hands-on areas, which in the past were treated more like stepchildren, are now embraced by modern medicine. Some of these newly accepted schools of thought are chiropractic, alternative medical treatments such as vitamin therapy, essential oil therapy for relaxation and mood enhancement, the use of oxygen therapy for intractable wound healings, energy such as that championed by the Barbara Brennan School of Healing, and much more.

With the combination of these old and new techniques, one might project that miracles are no longer needed or valid. This is not the case. In the presence of such a flurry of wonderful and helpful marvels, miracles are still very much at home. Just because a modern technique or new medicine might be available and used, we should not forget that regardless of whether the person recovers because he or she was given a drug that helped or a new surgery that corrected a defect or proved to be a life-saving procedure, God is the one who truly heals damaged tissue. Whether the forces for healing are channeled through natural cause-and-effect processes that we understand well, or through what are for us just now paranormal processes, the forces and the healing is God acting in these processes. God acts in what is for us the normal and what is for us the paranormal. We call things paranormal only because we do not yet understand the structure and paradigm for what happens in that arena, but all truth in this universe is God's truth, and all healing is God's healing since God created and empowers it all. Doctors cannot and do not actually heal anything. What they can do is provide the right environment in which healing can take place (Siegal 1986). The real miracle is the divine origin of healing, not the result of human manipulation, nor even the techniques utilized.

Growing ranks of medical doctors are discovering that medical miracles and the practice of medicine go hand in hand. Dr. Bernie Siegel has a thriving surgical practice at Yale University. He is a firm believer that people receive medical cures and that they experience miraculous self-healing all the time. He documented many of his experiences in his book *Love, Medicine and Miracles*, in which he cites the case of a patient who suffered from metastatic pancreatic cancer. Siegel had given this patient only a short time to live, then forgot all about the patient. The patient's son came to him after 10 years and said his father had just celebrated his 85th birthday. He had experienced a miraculous recovery on his own.

Until recent years, the usual training of medical doctors was lacking in adequate exposure to concepts that are available through sound psychology or responsible theology. Today, these sciences are becoming more and more

integrated into the curriculum of medical schools. In fact, when I was doing graduate work at Denver Seminary, I met several physicians who were getting counseling degrees so they could relate better to and understand their patients. To have this kind of concern and caring for people is a credit to their commitment and integrity. This caring translates into the ability to offer hope to all patients. It is important for professionals at all levels to be able to instill hope in others. In my role as a psychotherapist, I have worked with many people who were seriously ill. I can say that those who had a positive attitude, and demonstrated a desire to recover, usually did. The opposite is equally true. I recall a sad case in which an elderly client wanted nothing more than to die. After numerous suicide attempts, he finally succeeded. He was determined to die, while others were determined to live. Because of his deteriorating medical and mental conditions, he was not able to receive or operate within a framework of hope. Even though hope was continually being held out to him by his family, friends, and caregivers, he was unable to internalize it. Siegel states that (1986, 29; italics added) "*refusal to hope is nothing less than a decision to die.*"

The notion that a person has the ability to recover from cancer, tuberculosis, or other serious illness is not a usual part of the curriculum in medical schools, although there are some who are beginning to understand that the human body has a role to play in its own healing. Medical students are sometimes still encouraged to believe that healing results from their personal skill and training. For many years, Siegel thought his designation as an MD meant "major diety." He later learned that the mind is the place where healing first takes place, followed by the body.

Today, there is renewed interest in the mind-body connection. Recent studies at Duke University have included the component of faith and prayer in their repertoire. In a 1988 study at San Francisco General Hospital, an identified group of patients received prayer and a control group did not. This random double-blind study showed that those patients who were prayed for were five times more likely to recover and needed fewer antibiotics. They died less frequently than did the group for whom concerted prayer was not offered (Prather 1996). The Templeton Foundation has funded a project in conjunction with the Southern Medical Association for research in the area of mind-body relationship. This project may hold great promise and could reveal the mechanisms through which faith and medicine can work together as a team (Hamdy 2005). The University of Arizona Medical Center in Tucson, where I live, offers an ongoing seminar to all patients on the mind-body role in recovery from cancer and other serious illness.

The inclusion of hope is one of the great determiners of outcome. If a patient has hope, regardless of where that hope originates, that patient will get well quicker than the patient with no hope. Siegel (1986) has stated that there is no such thing as false hope. Hope is hope, and it is healing. Faith, prayer,

and hope are essential ingredients in recovery, and they seem to be an integral part of medical miracles. They act synergistically to assist the dying, ill, or injured person in participating in his or her own healing and recovery.

I recall that when I was injured in a serious auto crash last year, I sustained severe damage to my right hand, wrist, and arm. Everything (flesh, veins, arteries, muscle, tendons, nerves, etc.) was stripped from my fingers up to my elbow—degloved, as it were—and I experienced extreme blood loss. It took more than five hours of surgery to repair the damage.

I had a talented and dedicated trauma team, which included my hand surgeon, himself a believer. Everyone thought recovery would take several years and would involve reconstructive surgery, skin grafts, and plastic surgery to allow my limb to function. However, to the amazement of the team, I was dismissed from care in my 10th week. I could do all the things my recovery team said I would not be able to do such as make a fist, straighten my fingers upright, and rotate my hand and arm. I have had no reconstructive surgery, skin grafts, or plastic surgeries, nor do I anticipate any additional surgery. Everyone was fearful that I would have some horrible infection, either in the open wounds or in the bone, that would necessitate the amputation of my arm since I am a serious diabetic. None of their fears came true. At my dismissal, my surgeon said to me, with tears in his eyes, "Do you know that you have had a miraculous healing here?"

I replied that indeed, I was very much aware of this, and then I shared with him an additional part of the story. I explained to him that I had never felt alone or abandoned by God, even during the accident, nor while waiting for the paramedics, which took an abnormally long time. I experienced no fear during that time, although I realized I was seriously injured and was feeling extremely weak because of blood loss. I also shared the best part of my experience. I explained that I had been assisted by an angel, who appeared at the scene of the crash. This angelic being held my hand and arm together in his two hands for a long time, until paramedics arrived. Without the intervention of this angel, I would likely have expired due to the blood loss. In fact, during the surgery, they had to stop the operation because my blood pressure dropped so low that I had to have a significant transfusion.

I actually talked with this personage, and I have no doubt that he was an angel. He was huge, the largest person I have ever seen, and his voice had the most unusual qualities. I had never heard such melodious sounds before. While waiting for the paramedics to arrive, we engaged in conversation. I do not remember everything we discussed, although I do remember that I asked him what his name was. He told me he was called George. George sounded like such a perfect name for this angel. No one else on the scene saw this wonderful personage. I believe God loves to do things like this for us. I received a constant flow of prayers from many sources, and I had faith in God that I would recover. I also had strong feelings of hope during the whole

process. I was reminded once again of my own rhetoric, which I have offered to many of my clients. I took my own advice to heart: Life is a process, God is in the process; therefore we can trust the process.

One of the most confusing concepts concerning miracles is the question, Do I just accept miracles unconditionally by blind faith, or does my faith need something to anchor it, and if so, what is that something else? Some believe that simply exercising faith is enough to understand and accept the presence of miracles. This seems shallow and pretentious. It is true that we experience miracles through some sort of faith system; however, nowhere are believers expected to accept without question concepts and ideas that have been presented in the Holy Scriptures. The writers of the NT urged us to accept their teachings based on good evidence for whatever they were teaching. They spent considerable time and effort to educate and help their readers understand just what it was they were to believe, do, perform, or change in their lives, and why.

These writers always presented their ideas, thoughts, actions, and even the miracles they performed within the context of social, political, or spiritual concepts that people understood. They were adamant about readers having a solid basis for believing what they believed. We are encouraged to think deeply and logically about our faith and to be able to give good reasons for why it is real for us (2 Tim 2:15). The apostle Paul was a very educated and logical person, grounded in facts and reality. His theology was rock solid. He urged us to "think on these things" (Phil 4:8). In John's first epistle to believers everywhere, we are encouraged to put people and their ideas under scrutiny to see if they are real or not (1 Jn 4:1–3). After we have carefully examined the teachings, and the consistency of their teachers, we can come to some conclusion as to their credibility.

The confusing picture that we have concerning miracles seems to come from an all-or-nothing mentality. In psychology, this rigid outlook is called black-and-white thinking. Many people approach their world through the lens of this dysfunctional view. We need to be aware of what our faith rests on before we accept without reservation, or categorically deny, the content of faith. We need to think through and know what we are to believe. In this hectic world, where we hear a cacophony of voices, we owe it to ourselves and others to have a clear reason to believe what it is that we believe.

What do miracles mean for the future of the believing communities? Will they have a role to play in the faith of tomorrow? What might that role be? Will miracles become irrelevant in the age of modern medical technology? These questions have great import to faith communities in general, but even more to persons who experience miracles in their lives.

We have had many generations of the experience of miracles. Throughout history, God has taken an interest in us, helping us in ways we have not understood. Miracles are one of those benchmarks that we recognize when

we assess the progress of the human journey. On the basis of the past, we can look to the future and say with confidence that God does not change, and therefore we can trust God to provide for us. Miracles are one of God's ways of letting us know that he cares about our suffering and that he will make it possible for us to keep on keeping on.

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CHAPTER 6

History of Research on Faith, Prayer, and Medical Healings

Kevin J. Eames

During the early part of the twentieth century, three important scientific and cultural movements emerged that set the stage for their subsequent convergence: first, the emergence of psychological functionalism and an expanded interest in applied psychology, which translated into a growing interest in the psychology of religion; second, the recognition of the connection between the mind and the body; and third, the rapid growth of the Pentecostal movement, with its emphasis on religious experience, including the experience of divine healing. These movements represented very different and often conflicting intellectual traditions, yet they converged in the middle to late twentieth century, as we developed increasing empirical research on the relationship between faith, prayer, and nonmedical healing.

Functional psychology was primarily an American intellectual movement. It expanded scientific psychology, which observed psychological phenomena and asked what? and how? Functional psychology added the question, why? By asking why, the functionalist sought to identify human potentials, capabilities, and aptitudes behind observable psychological phenomena. This approach, in turn, enabled psychology to be applied to "success in living, with the adaptation of the organism to its environment, and with the organism's adaptation of its environment to itself."[1] It set the stage to enable researchers to ask how divine healing might be explained as an adaptive mechanism—as an individual seeking to adapt to the environment or changing the environment to better suit the individual.

The emergence of functionalism as the dominant school in American psychology found compatibility with the second movement: the connection

between the mind and the physical health of the body. The psychosomatic medicine movement sought to identify the relationship between emotions and disease, recognizing the mind's power to influence physical health. The work of Walter Cannon and Hans Selye exemplified this movement, with an emphasis on the pathogenic effects of stress.[2] Highlights of the psychosocial aspects of the pathogenesis of disease included the development of the Social Readjustment and Hassle scales, which sought to link both significant life events and daily frustrations with the onset of disease. Some personality traits, such as the type A behavior pattern first observed by two cardiologists in 1959, are believed to enhance the development of stress-related illness.[3]

Although functionalism and psychosomatic medicine were intellectually compatible, they both approached the study of psychological phenomena with an essentially naturalistic framework. Extensions of American functionalism into radical behaviorism and evolutionary psychology underscored this naturalism, leaving little room for mystical model as an explanation for experienced phenomena. Hence the emergence of Pentecostalism, with its emphasis on signs and wonders such as divine healing, was antithetical to the skepticism of functional psychology. Both movements as intellectual and cultural forces grew in ascendancy in their separate and very different spheres. It was the mid-twentieth century before attempts at subjecting these miraculous outcomes to empirical scrutiny were undertaken. More significantly, inasmuch as divine healing seemed confined to a specific milieu that remained on the fringes of mainstream religiosity, researchers also explored what role religion itself had on health and illness.

In the March 2002 volume of the *Journal of Religion and Health*, Thomas St. James O'Connor published an article that asks the question, Is evidence-based spiritual care an oxymoron?[4] The tension between the empirical and the spiritual is eloquently reflected in O'Connor's question and recalls Hamlet's caution to Horatio as they confronted the ghost of Hamlet's father: "There are more things in heaven and earth, Horatio, than are dreamt of in your philosophy."

Hamlet's caution against an overly narrow metaphysic has not deterred researchers from attempting to explore the relationship between religion and psychological phenomena. Two seminal works that no respectable chapter on the psychology of religion would omit are Sigmund Freud's *The Future of an Illusion* (1928) and William James' *The Varieties of Religious Experience* (1902).

Freud's book certifies science as the ultimate victor over religious dogma. He notes that the scientific spirit will encourage a process that replaces ignorance with rational enlightenment, with no room left for religion: "The more the fruits of knowledge become accessible to men, the more widespread is the decline of religious belief, at first only of the obsolete and objectionable expressions of the same, then of its fundamental assumptions also."[5] Freud

also dismisses pragmatism as an argument for religion's maintenance. He argues that while religion may have made beneficial contributions by engendering happiness and consolation and restraining antisocial behavior, it has not kept humankind from wanting to escape its influences as repressive of primal instincts. It is only through scientific rationalism, and more specifically, psychoanalysis, that humanity will escape the confines of the religion that both comforted and enslaved their ancestors.

Freud's dismissal of so-called medical miracles would no doubt reflect his belief in the development of hysterical symptoms as a means of repressing unwanted impulses, a perspective he cultivated in his work with the hypnotist Charcot and his older colleague Breuer. In short, religion itself was, for Freud, a manifestation of pathology and incongruent with the notion of healing reflected in Freud's system of psychoanalysis. While Freud was unwavering in his rejection of the spiritual, however, many of his followers were unwilling to accept a purely naturalistic explanation for some phenomena. They attempted a rapprochement between psychoanalysis and religion. In *A History of the Cure of Souls*, John T. McNeill notes that Otto Rank, Oskar Pfister, and Carl Jung made notable efforts to return some aspects of the soul to the curative potential of psychoanalysis.[6]

In 1902, William James published a landmark study of religion titled *The Varieties of Religious Experience*.[7] Consistent with his philosophy of pragmatism, James was not concerned with staking out a position about the veracity of a religious worldview; instead, he addressed the question as to whether religion is beneficial or harmful. He identified the positive aspects of religion in his discourse about healthy-mindedness and the mind-cure movements. James chronicled successful resolutions of mental anguish and also physical ailments, such as sprained ankles and influenza, through mind-cure, that is, psychospiritual healings. In contradistinction to Freud's disdain for religion, James argued that the religion of healthy-mindedness is as successful as science in alleviating suffering. He asserted that healthy-mindedness "gives to some of us serenity, moral poise, and happiness, and prevents certain forms of disease as well as science does, or even better in a certain class of persons."[8] To support his observations of the effectiveness of psychospiritual cures, James appealed to an article written by H. H. Goddard of Clark University, who asserted that mind-cures are indeed cures, but "are in no respect different from those now officially recognized in medicine as cures by suggestion."[9]

Some 60 years later, Jerome Frank expanded on James' notion of healthy-mindedness in his book *Persuasion and Healing*.[10] Frank expanded on the curative power of suggestion through his exploration of the placebo effect. Amanda Porterfield noted that Frank's book offered a "full-fledged theory about the relationship between the placebo effect and religious healing."[11] Frank's book was an attempt to critique various forms of psychotherapy, with an eye toward identifying common themes and characteristics. He

emphasized that illness is not necessarily divorced from the mind and that healing is as much a psychosocial phenomenon as it is a biological one.

In his chapter on nonmedical healing, Frank noted that those who practice it tend to view "illness as a disorder of the total person, involving not only his body, but his image of himself and his relations to his group; instead of emphasizing conquest of the disease, they focus on stimulating or strengthening the patient's natural healing powers."[12] He summarized his chronicle of nonmedical healing in primitive cultures by noting the power of emotions on health. Converging with much of the current and past literature on the physiological damage of stress, Frank asserted "that anxiety and despair can be lethal; confidence and hope, life-giving."[13] Thomas Csordas lists Frank's "persuasive hypothesis" as one of the compelling anthropological hypotheses for the efficacy of ritual healing, noting that if the supplicant is persuaded that his or her ailment will be relieved by the culturally sanctioned healer, then relief is likely to occur.[14]

Frank also identified common characteristics of phenomena like Communist thought reform, religious revivalism, and nonmedical healing. They all include a sufferer and a persuader: the former is distressed, demoralized, and alienated from the support community; the latter represents the power of the overarching worldview that governs the commonly accepted views of illness and health, despair and hope. He summarized the empirical research on the placebo effect, wherein "the administration of inert medications by physicians demonstrate that the alleviation of anxiety and arousal of hope through this means commonly produces considerable symptomatic relief and may promote healing of some types of tissue damage."[15] Frank's work on persuasion and the placebo effect provided a psychological explanation for the medical miracles that occurred during the Pentecostal revival movements in the mid-twentieth century.

The study of religion as psychological phenomena was occurring together with a reemerging emphasis on the miraculous in Christianity. Popular images of evangelists surrounded by clouds of suspicion have been fueled by cinema works like *Elmer Gantry* and the more recent Steve Martin film, *Leap of Faith.* Financial and sexual scandals involving televangelists have added credence to these negative impressions. David Harrell Jr. chronicles the history of the healing revival movement in his book *All Things Are Possible: The Healing and Charismatic Revivals in Modern America.*[16] Harrell notes that prayer for the sick and healing miracles became part of the overall revivalism experience growing out of the nascent Pentecostalism of the early twentieth century, with its surge of divine healing revivals in the 1950s.

Pentecostalism was characterized by ecstatic religious experiences, the sign gifts of the Holy Spirit, and divine healing. The healing revival movement that blossomed into the charismatic movement solidified the Pentecostal doctrine of divine healing. Pentecostal revivalists preached that good

health was a benefit of Christ's atonement but that the supplicant must have the requisite level of faith for the healing to occur; in fact, the supplicant was held responsible whenever a miraculous healing did not occur.[17] The evangelists claimed themselves to be conduits of divine healing, with varying degrees of proximity to the afflicted. Healing was not only conveyed through the laying on of hands, but also through anointed prayer cloths, praying from prayer cards, and through media like radio and television.

Of course, skeptics also arose to challenge the authenticity of medical healing. To support the validity of their healing ministries, many of the Pentecostal evangelists encouraged participants who had been healed to provide testimonials, particularly with medical evidence. Unfortunately, such evidence was often of poor quality, and evangelists were compelled to publish disclaimers to protect themselves against legal action.[18]

The Pentecostal movement was not the only Christian movement to appropriate the healing power of God. Anthropologist Jeannette Henney conducted field observations of Fundamentalist Shaker sects and a Dutch healing cult called "Streams of Power" in the Caribbean island nation of St. Vincent.[19] Henney reports witnessing a healing session after a Streams of Power service, in which the afflicted awaited the laying on of hands by the evangelist. Unlike the highly charged emotional level of some Pentecostal healing services, Henney reports that there was no "trembling or excitement evident on the part of either the evangelist or the patient."[20] Similarly to Pentecostal practice, healing could occur at remote distances, with a handkerchief blessed by the evangelist functioning as the vehicle through which God's healing power was conveyed.

Sociologist Meredith McGuire reports on alternative healing practices among suburban New Jersey residents in America in her book *Ritual Healing in Suburban America*.[21] McGuire not only reports alternative healing practices among Christian groups, but also New Age and secular healing therapies as well. McGuire notes that among the Christian groups she observed, the healing power of God was appropriated through laying on of hands, prayers of faith in tongues (glossolalia), prayer with fasting, visualization, and claiming of healing. McGuire also witnessed the phenomenon known as *slaying in the Spirit* among traditional Pentecostals. The supplicant responds to the healing touch of the minister by falling to the floor. Reflecting the demand characteristic of this particular healing phenomenon among Pentecostals, McGuire notes that the "process is sufficiently common and ritualized in some prayer groups that persons who request healing stand in line and, as they are touched, fall into the waiting arms of an usher, who lays them on the floor gently while another usher covers their legs for modesty. In such a context, the 'slaying in the Spirit' is expected; not to fall is deviant and disturbing to the rest of the group."[22] McGuire reports that the Christian healing groups she studied shared similarities with other non-Christian

healing groups regarding the role of the healer, the role of the supplicant, and the use of rituals. Differences centered on the centrality of the healing power emanating from God, the role of Satan in sickness and suffering, and the necessity of the supplicant's faith in God.

Deborah Glik also conducted research with participants in healing rituals in Baltimore in the mid-1980s. Glik surveyed participants in Christian charismatic healing groups, metaphysical or New Age healing groups, and a comparison group of medical patients on variables related to religiosity and psychosocial distress.[23] In her analysis of the results, Glik notes that the relationship between religiosity and distress may be accounted for by social selection and social causation. For the former, individuals who are less emotionally stable are attracted to charismatic healing groups that stress orchestrated rituals and scripted experiences; for the latter, the intensity of the small-group experience may induce a dissociative state in supplicants seeking alleviation of symptoms.

In a separate study, Glik analyzed survey data from 160 Baltimore participants in spiritual healing groups. She found that a majority of participants engaged in a "health problem redefinition" that was more congruent with the expectations of spiritual healing than their original problem formulations. Furthermore, those participants who did redefine their health problems were also more likely to claim that they had been healed.[24] In essence, Glik hypothesized that the healing was a product of the interaction between the social context and cognitive receptivity.

Much of the empirical research on prayer and healing seeks to quantify the relationship between faith and health. The earliest empirical research was an 1872 study by Francis Galton on whether there was a statistical relationship between prayer and longevity—both for the ones who pray and for the subjects of prayer. Galton's review of actuarial tables published at the time led him to conclude that no such relationship existed. Although Galton's conclusions were based on flawed design methodology, his research was seminal in its supposition that prayer can be studied empirically.[25] Carl Thoresen, Alex Harris, and Doug Oman note that initial modern empirical studies on the relationship between religious variables and health did not get started until the late 1960s and initially focused on specific denominations.[26] These studies investigated the relationship between religious affiliation, denominational membership, regularity of church attendance, and health variables like coronary disease and cancer. The results suggested that "there is something about being involved in a religious organization, activity, or group that relates to better health status, including reduced risk of mortality."[27]

Margaret Poloma and Brian Pendleton focused more specifically on the religious activity of prayer and its relationship to quality of life. After conducting a factor analysis on 15 survey items related to prayer activities, Poloma and Pendleton found four discrete types of prayer: (1) meditative, (2) ritualist,

(3) petitionary, and (4) colloquial.[28] Their hypothesis that prayer would associate with measures of quality of life was supported; meditative prayer was moderately predictive of existential well-being and religious satisfaction, and colloquial prayer was predictive of happiness. Conversely, individuals who engage exclusively in ritualistic prayer are more likely to be depressed and tense.

Michael McCullough conducted a comprehensive review of the empirical research literature on prayer and health.[29] He divided the research into four categories: (1) prayer and subjective well-being, (2) prayer as a form of coping, (3) prayer and psychiatric symptoms, and (4) intercessory prayer. The research on intercessory prayer is of particular interest to the relationship between prayer and healing. McCullough cites Byrd's double-blind study of intercessory prayer for cardiac patients as a well-designed empirical study. One group of cardiac patients was the subject of intercessory prayer, while the other group was not. Those patients who were the subject of intercession had fewer cardiac events, required less medication, and reported a lower overall severity of symptoms than those patients in the control group.[30] Thoresen, Harris, and Oman[31] note that W. S. Harris and his colleagues[32] replicated Byrd's research. They, too, found that cardiac patients that were the subjects of intercessory prayer did better on objective outcome measures of cardiac health than patients who were not the subject of prayer.

The January 2003 volume of the *American Psychologist* set aside a section for studies on spirituality, religion, and health. William Miller and Carl Thoresen began the section by providing an overview of the state of the research and addressed three methodological issues related to the empirical study of religion and health: operational definitions, methods of statistical control, and criteria for judgment of evidence in support of specific research hypotheses.[33] Lynda Powell, Leila Shahabi, and Carl Thoresen reviewed nine hypotheses related to the links between religion and physical health.[34] The authors reviewed relevant research articles specific to the individual hypotheses, including or excluding research on the basis of a levels-of-evidence approach encouraged by Miller and Thoresen in the same volume. Their analysis of the research found persuasive evidence for the hypothesis that church attendance protects against death. Some evidence was found to support the hypotheses that religion protects against cardiovascular illness and that being prayed for improves recovery from acute illness. Some evidence was also found to support the hypothesis that religious belief actually *impedes* recovery from acute illness. Hypotheses that were unsupported by the research included protection against cancer mortality, cancer progression, disability, and longevity.

In the same volume of the *American Psychologist*, Teresa Seeman, Linda Fagin Dublin, and Melvin Seeman reviewed research literature on the possibility of biological pathways linking religiosity and health.[35] The authors found some support for the hypothesis that Judeo-Christian religious practices are related to lower blood pressure levels, though the research designs

employed in these studies were reason for caution in generalizing the research. Similarly, the authors found modest support for the hypothesis that Judeo-Christian religious practices are related to better immune functioning. Research associating cholesterol levels with religiosity was not supported; comparison studies among groups did not control for the affect of diet and genetic heritage on the participants. In a review of the research associated with the practice of yoga or meditation, empirical research appeared to support a relationship between these practices and lower blood pressure, lower cholesterol, lower stress hormone levels, variations in patterns of brain activity, and better health outcomes for clinical patients.

The final article in this section of the *American Psychologist* reviewed advances in the measurement of religion and spirituality and its implications for health-related research. Peter Hill and Kenneth Pargament noted the problems with common measures of religiosity such as the tendency to bifurcate spirituality and religiosity or assess global variables like church attendance.[36] Such difficulties allow for inclusion of valid alternative hypotheses and make the linkage between spirituality/religiosity and health tenuous. The authors recommended several constructs that should be considered in the more precise assessment of religion and spirituality, including measures with greater sensitivity to cultural context that assess spiritual well-being and growth. They emphasized the importance of the use of alternatives to self-report measures.

These authors' concerns reflect earlier concerns expressed by Thoresen, Harris, and Oman regarding greater specificity in identifying and exploring religious variables.[37] They cite three exemplary studies that reflect greater precision in the relationship between religion and health: a study linking certain religious coping styles with mental health outcomes,[38] a study examining the relationship of religious coping to adjustment after kidney transplant surgery,[39] and a study examining religious and spiritual factors related to mood management and pain management among arthritis patients.[40] The authors also recommend the wider employment of additional research designs and methods, including case studies, interviews, and daily monitoring methods.

It may appear that the empirical examination of faith is indeed an oxymoron. However, the link between the abstraction of faith and the very real outcome of physical healing does lend itself to a careful examination of the relationship between the two. Moreover, the apparent oxymoron is likely due to an artificial dichotomy between faith and the natural world that is a vestige of a Kantian dualism between the knowable and unknowable. An approach to the empirical examination of the relationship between faith and health must begin with an identification of the epistemological framework on which the research is based. If the researcher assumes an epistemological framework based on naturalism, the treatment of faith and health will be necessarily confined to naturalistic explanations for observed outcomes. Conversely, if

the researcher assumes an epistemological framework that provides for the existence of a God who acts in the affairs of human beings, explanations may include divine intervention as bona fide.

It is, in any case, incumbent on the researcher to exercise adequate controls and employ responsible research designs in the investigation of health-related phenomena. In fact, it may be argued that the researcher whose epistemological framework provides for divine intervention must exercise greater stringency and accept a higher level of probability for outcomes indicating the positive role of faith on health. More important, it is the responsibility of all researchers, regardless of their epistemological framework, to acknowledge the potential for error and the limits of human knowledge, allowing us then to embark on our exploration with a requisite degree of humility.

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CHAPTER 7

Psychoneuroimmunology and Jesus' Healing Miracles

Daniel J. Gaztambide

> Words were originally magic and to this day words have retained much of their ancient magical power. By words one person can make another blissfully happy or drive him to despair. . . . Words call forth emotions.
>
> —*Sigmund Freud (quoted in Capps 2000, 191)*

> You cannot write a prescription without the element of placebo. A prayer to Jupiter starts the prescription. It carries weight, the weight of two or three thousand years of medicine.
>
> —*Eugene DuBois (quoted in Sternberg 2000, 164)*

> Faith heals, and that's a fact.
>
> —*John Dominic Crossan (1998, 297)*

Was the historical Jesus able to cure individuals' physical ailments by transforming their faith and beliefs? Is the miracle tradition in the Gospels historically reliable? By employing the fields of historical Jesus studies, medical anthropology, and psychology, I hope to provide some answers to these pressing questions.[1] I first discuss recent scholars' opinions concerning the healing miracle tradition and its historicity, followed by a consideration of recent advances in the study of emotions, belief, and physical health.

In this exploratory study, I concentrate on employing the interdisciplinary field of psychoneuroimmunology, the study of how our thoughts and beliefs affect our brains' and bodies' health, as a lens through which to interpret the healing tradition. Through it I develop a general framework from which to study and understand Jesus' healing activity. I then illustrate the

interpretive capacity of this general framework in terms of a specific case from the Gospel of Mark and attempt to concretize our theoretical propositions. Finally, I outline my preliminary conclusions and point out some future lines of research.

RECENT HISTORIANS DISCUSS HEALING MIRACLES AND THE HISTORICAL JESUS

Can miracles actually happen?[2] If defined as something that defies the normal function of nature and all probability, Ehrman (1999, 2000) argues that it would be impossible for a historian to show that they happen. From Ehrman's perspective, a historian cannot measure or test the action or inaction of an event that defies all probability. For Ehrman, it is of importance that we (2000, 199) "realize that in the ancient world miracles were not understood in the quasi-scientific terms that we use today." People in the ancient world did not understand miracles as violations of the natural order of things, for in most cases, the natural world was not perceived as separate from a supernatural realm (Ehrman 2000).

The question for people of the ancient world was not if miracles *could* happen, but rather "(a) who was able to perform these deeds and (b) what was the source of their power? Was a person like Jesus, for example, empowered by a god or by black magic?" (Ehrman 2000, 199). Considering the inability to properly test whether miracles can happen with any probability, coupled with the distance in ideology between the ancient and modern worlds, Ehrman concludes that the historian would (2000, 202) "not be able to confirm or deny the miracles that he [Jesus] is reported to have done."

It is where Ehrman fears to tread that Meier (1994; see also Powell 1998; Capps 2000) steps in. Meier accepts as irrefutable fact that Jesus did perform deeds of great repute "that were deemed by himself, his supporters, and his enemies to be miracles" (Powell 1998, 140; see also Capps 2000, 16). He critiques those who reject the miracle tradition altogether as imposing a naturalistic philosophy on the evidence, but cautions that he is not proposing that Jesus actually did miracles. His argument is rather more nuanced. Like Ehrman, he argues that people in the ancient world believed that miracles were a part of the daily interaction between the human and the divine. Thus it fits the context of Jesus' era, so that the *attribution* of miracle working to him fits the environment.

Furthermore, the miracle tradition has multiple attestations in the Gospel documents, meaning that the tradition that Jesus performed spectacular deeds was probably not the invention of the early church. On the basis of this evidence, Meier argues that Jesus performed acts that he and his contemporaries *interpreted* as miracles, and that this was probably the aspect of his ministry that "contributed the most to [Jesus'] prominence and popularity

on the public scene—as well as to the enmity he stirred up in high places" (Capps 2000, 17; see also Powell 1998, 140). Meier contends that if, in spite of the available evidence, the miracle tradition is to be rejected as unhistorical, then (1994, 509–34, particularly 512) so should every other Gospel tradition about him (see also Powell 1998, 140; Capps 2000, 16) since it has equal or stronger historical reliability than other facts commonly accepted within historical Jesus scholarship, such as Jesus' use of the phrase the *Kingdom of God*, his use of the term *Abba* in his prayers, or that he was a carpenter (Powell 1998, 140).

Although his boldness is appreciated, Meier nevertheless leaves open the question of whether those deeds of Jesus interpreted as healing miracles involved any actual healings. This is a questioned tackled by models drawn from medical anthropology, popularized in the works of Crossan (1992, 1998) and Pilch (2000). Like Ehrman and Meier, Pilch and Crossan also make the distinction between miracles as conceived by moderns and as understood in the ancient world. They also extend the discussion in making a distinction between modern and ancient conceptions of healing and health (Crossan 1998, 293; Pilch 2000, 19–38), criticizing past uses of modern medicine in interpreting ancient health systems. Both scholars adopt a hermeneutical distinction provided in medical anthropology between *healing illness* and *curing disease. Disease* is defined as the actual biological malady in a person's body, while *illness* is defined as the social and interpersonal meanings constructed and attributed to that malady (Crossan 1992, 336–37, 1998, 295–96; Pilch 2000, 19–38; see also McGuire 1988, 6). Hence a person with leprosy would not only suffer from a biological condition (the disease), but also from the social taboos of their culture (the illness). Crossan and Pilch argue that by providing alternative social support and alternative meanings to the conditions of those who suffered, Jesus was able to heal their illness.

By removing social stigma (via declaring the unclean to be clean, for example), Jesus could make life more bearable for those who suffered from disease. Jesus then could heal illness as defined by medical anthropology, but could he cure disease? Pilch and Crossan answer with a resounding no (Crossan 1998, 297–303; Pilch 2000, 142). Pilch, in particular, goes to great length to make the argument that asking whether Jesus actually cured people's diseases imposes Western medical notions on the ancient mind. He argues that Western medicine is generally focused on treating disease, while ancient medical systems were more concerned with treating illness (Pilch 2000, 60). Theoretically, then, lepers and other ill individuals would have perceived Jesus as having healed them, although their physical symptoms remained (Powell 1998, 89).

Is it valid to refer to these so-called healings as miracles? Crossan defines miracles not as an actual intrusion of the supernatural on the natural, but rather as (1998, 303) "*a marvel that someone interprets as a transcendental action*

or manifestation." By defining miracles within the realm of subjective experience, Crossan seems to state that miracles are in the eye of the beholder. This definition has some problems, to which we shall return later on. For now, we will focus on critiques of Pilch's and Crossan's medical anthropology models.

The division between healing illness and curing disease, in particular, has evoked some strong criticisms. Borg, in his review of Crossan's work, writes (1994, 43), "Can 'healing illness' without 'curing disease' make much sense in a peasant society? Are peasants (or anybody else, for that matter) likely to be impressed with the statement 'your illness is healed' while the physical condition of disease remains?" (see also Capps 2000, 25). This sentiment is also shared by Capps, who adds that (2000, 34) "illness (as socially defined) and physical disease are interactive," hence such a dichotomy is drawn too rigidly. Just, in an article for the *Review of Biblical Literature*, conveys a similar attitude toward the medical anthropology employed by Pilch:

> Did the woman with the flow of blood continue bleeding, and merely find new meaning and social acceptance for her physical condition? Are not the Gospels claiming that there was also some type of *physical* transformation? It seems too little to explain Jesus' entire "healing" activity merely in terms of hermeneutical transformation or social acceptance, even if the nature of the biblical texts do not allow precise diagnoses of people's physical "diseases," nor provide bio-medical explanations of how Jesus "cured" them. (Just 2001, 4)

Although Just is in agreement with Pilch's critique of the ethnocentrism of past biblical scholarship (which relied too heavily on Western biomedical models), he also critiques Pilch's assumption that "Western biomedical approaches had absolutely nothing to contribute to our understanding of biblical texts" (Just 2001, 3). A combination of both medical anthropology *and* modern medicine, Just pleads, would probably enhance our understanding of healing in the ancient world.

Borg (1994), however, is more critical about the use of modern medical science in studying the healing-miracle tradition. Not unlike scholars reviewed previously, Borg regards the miracle tradition as indisputably historical and cites multiple attestations in the Gospel sources as evidence. Although miracles may be a difficult concept for moderns, Borg argues that in the ancient world, they were considered to be common events. Even Jesus' enemies did not deny that he could do such things, but rather questioned under what power they were performed—did he heal via the power of God or of an evil spirit (see Powell 1998, 105–6)? It is this commonality with the historical context that makes the miracle tradition credible. But how does one understand these extraordinary healings? Borg contends that a scientific explanation (1994, 66) "that stretches but does not break the limits of our

modern worldview" would fail to account for—or understand—the fact that healings were experienced as acts of an "otherworldly power." Here we can discern Borg's fear that modern scientific evaluations of the miracle tradition would be reductionistic in nature, reducing the healings to some simple physiological phenomenon and devaluating the ancients' experience of divine intervention.

The last scholar to be considered in this review is the psychologist Donald Capps (2000; see also Capps 2004). Concurring with Borg and Just in their critique of the sharp distinction between illness and disease and the assertion that Jesus could heal one but not cure the other, Capps goes on to present his thesis that many of the diseases Jesus treated were produced by socially and interpersonally produced anxieties. He argues that by changing the socially constructed meanings that produced anxiety (i.e., the illness), Jesus could have actually cured disease—defined as the somatization and internalization of those meanings in the body as biological symptoms (Capps 2000, 34).

Capps draws on Sigmund Freud's contention that anxiety is accompanied by physical maladies that affect the body and argues that (2000, 170) "both *disease* and *illness* have psychological causes and explanation." Both take place within and are affected by societal and personal relations as well as the subjective perception of the individual. One interesting insight of Capps' study is that one of the most effective components of Jesus' healings (2000, 217) "was his [Jesus'] recognition that he could not heal without a true attitude of trust by those who were beneficiaries of the healing," remarking on the necessity of faith on behalf of the individual for the healing of the disease to take place and on Jesus' repeated acknowledgment posthealing that it was the person's faith that had enacted the miracle.

An analysis of these six scholars reveals at least four themes that their discussions share in common. First, there is a nearly unanimous consensus that in the ancient world, miracles were considered part and parcel of the natural order of things, which makes Jesus' healing ministry fall within the environment of the first century. Second, there is the recognition that in terms of multiple attestations of sources, the miracle tradition has a stronger presence than many other traditions that are usually considered as factual (such as Jesus' use of the term *Abba* in prayer or his career as a carpenter).

Unlike the first two themes, which seem to have a general consensus, the later two are fraught with greater diversity and debate. The third theme is that of process: how was it that Jesus healed? Here we can discern the debate between the use of medical anthropology and other modern medicine interpretations. Could Jesus remove anxiety and heal illness without curing disease, or could he heal illness and, in doing so, treat or even cure disease? The fourth theme involves epistemological, ontological, and ethical problems (Crossan 1998, 303–4): regardless of which interpretive model is used to understand the healings Jesus purportedly performed, there is the question

over whether those acts can or should be considered miracles. If miracles are defined as a purely subjective interpretation of a seemingly marvelous event (like Crossan), should Jesus' healings be considered as miracles? If miracles are defined as the experience of an intrusion of an otherworldly power (as Borg), how should one classify Jesus' deeds?

By employing the tools of neuroscience, psychoneuroimmunology, and psychoanalytic psychology, we hope to provide some answers to the second set of questions discussed. First, we will try to answer if it is possible for Jesus to cure disease by healing illness. Second, we will attempt to elaborate a definition of the miracle experience that takes into account both the subjective and objective factors involved.

CONNECTIONS BETWEEN EMOTIONS, STRESS, AND HEALTH: A CRASH COURSE ON PSYCHONEUROIMMUNOLOGY

An authority on the emerging field of psychoneuroimmunology, Sternberg (2000, 21–32) reveals some of the latest research connecting emotions and health. The empirical evidence shows that emotions are not just ethereal concepts floating around in the mind, but are tied to specific physiological conditions in the body. Each emotion (love, fear, sadness, etc.) is most easily recognizable by the physical effects of which it is a part such as the balance of certain chemicals in different areas of the body, the tension or relaxation of muscle fibers, heart rate, or blood pressure (see also Flaherty 2003, 149–68). One of the leading neuroscientists promoting the recognition of the physical effects of emotion, Antonio Damasio (2003), has constructed a model that not only accounts for the emotional states of the body, but also those perceptions of emotional states—usually referred to as feelings. An emotional state involves a certain physiological state of the body, which is then mapped in certain areas of the brain. These body maps are where feelings actually take place. So Damasio writes (2003, 88), "The substrate of feelings is the set of neural patterns that map the body state and from which a mental image of body state can emerge" (see also Flaherty 2003, 141–48).

For example, when we perceive an object that irritates us—that makes us angry—there is a delicate feedback process between the external object and our internal world. Anger begins with the actual physiological changes that take place during the emotion: the tension of the muscles, an increase in blood pressure and heart rate, and increases in cortisol (which we will discuss shortly). This state of the body is then mapped in the brain via a variety of neural patterns that come together to constitute an image of what the body looks like during the emotion anger. These body maps provide the experience of feeling, the mental idea of what is going on in the body. The emotion anger leads to the feeling of anger: we thus become aware that we are

angry. Along with emotion and feeling also come thoughts and memories: "This really angers me," or "I ought to punch him in the nose." Emotion in the body leads to feeling in the brain, which leads to thoughts and memories. Damasio (2003, 71) makes it clear that this process can also work in reverse: thoughts and memories can also lead to emotions and feelings in a complex, two-way network.

As just discussed, one of the ways in which the brain and the body are connected is by the feedback mechanism underlying emotions and feelings. Physical states in the body (emotions) affect the neural mapping of the brain (feelings and thoughts), and the mapping of experiences on the brain (thoughts and feelings) affect the physical states of the body (emotions). We will now take a closer look, via the discerned biological pathways between brain and body, at how this discussion relates to health and, subsequently, healing.

In the presence of a bodily infection, the body's stress response is activated. Immune cells begin to reproduce to deal with the insult to the body, producing substances called *interleukins* (Sternberg 2000, 53–54). These interleukins then travel to the hypothalamus in the brain and stimulate it to release cortico-tropic-releasing-hormone (CRH) into the pituitary, which in turn releases adreno-cortico-tropic-hormone into the adrenal glands above the kidneys. The adrenal glands then release a hormone called *cortisol*. Cortisol serves a crucial role, for it not only shuts down the production of immune cells—so that they do not turn on the body once the infection is gone—but also shuts down the production of CRH in the hypothalamus (Sternberg 2000, 57–58). It is cortisol's "negative-feedback mechanism . . . [that] prevents the stress response from spiraling out of control" (Sternberg 2000, 58). This process is triggered not only by a physical infection of the body—such as a virus or a bacteria—but also by the presence of a stimulus that is deemed threatening to the organism (such as a predator or a stressful social situation). According to Sternberg (2000, 93), this observation leads the endocrinologist Alan Munk to theorize that the stress response, with its release of cortisol, "was there to ready the organism for a fight and to protect it from injury. He proposed that the dampening effect of steroids on the stress response formed a logical, built-in brake to the system to keep it from overshooting once the stimulus was gone."

During a stressful event, the immune system is momentarily toned down so that other aspects of ourselves may receive an extra boost in energy: our attention becomes focused, our muscles prepare for fight or flight, or our ability to make quick decisions under drastic situations becomes heightened. Some of these dose effects of stress are "good, [but] too much [stress] is bad" (Sternberg 2000, 110). Our bodies have the capacity to undergo short-term amounts of stress without incurring any long-term deleterious effects. "However," Sternberg (2000, 111) writes, "when the stress turns chronic,

immune defenses begin to be impaired." In fact, chronic stress results in *increased* cortisol, which can devastate the immune system to such an extent that one becomes more susceptible to disease. This can be quite deadly since an individual whose immune system has become flattened could easily die from septic shock when even the simplest bacteria penetrate the body. After a while, the body's reserves of cortisol would become depleted, so that in the face of anxiety and stress, the immune system would overshoot itself. Without cortisol to tone down the production of immune cells, the body would soon turn on itself and instigate autoimmune diseases. Anxiety, fear, or depression could upset the balance of the body's stress response—in the direction of susceptibility to infection or to the proliferation of autoimmune diseases, devouring the host.

In talking about stress, we are not merely referring to vivid, physical threats, but also to mythical or socially constructed threats (one thinks of the medical anthropological definition of *illness*). The perception that one is a social outcast, or that one will not be able to succeed in life, is a stressor that can be just as powerful as a physical threat of bodily harm (Sternberg 2000, 122; see also Flaherty 2003, 176–81). Hence illness—defined within medical anthropology as a socially constructed narrative—can heighten one's biological susceptibility to disease. If illness or socially constructed narratives can serve as stressors that can worsen or even trigger disease (see Sternberg 2000, 117–18), then could healing illness play a role in curing disease? If the belief that we are worthless or in a state of constant damnation can harm our bodies, could the belief that we are delivered from such a state heal them as well?

Conditioning, Expectation, and Placebo: The Power of Faith

We learn, psychologically as well as physiologically, through conditioning—the repeated exposure to a certain stimulus in the context of a certain response. Learning, and the expectation that comes with it, is also a crucial aspect of belief. Such faith, as it turns out, is not limited to the field of religious experience. Sternberg (2000, 164) writes that

> there is an element of this sort of learning in every prescription we take: we have learned that medicines can make us better. We *believe* it. That amount of actual improvement in illness that comes from this learned expectation is called the placebo effect. It is the psychological component of that cure. *About one-third of the therapeutic effect of every pill comes from the placebo effect.* . . . In the first half of the twentieth century, physicians recognized that the placebo effect was a powerful healer, and they used placebo sugar pills to treat illness, not just to test a drug's effects. (emphasis added)

The placebo effect is a phenomenon in which a drug that is supposed to have no actual physiological effect actually stimulates some measurable

change in a person's physical health, simply because the person believes the drug will have an effect. This response has been found not only when inert drugs are used on an unsuspecting patient, but also in a variety of other settings. For example, patients suffering from angina pectoris (a type of severe chronic chest pain) were given fake operations (usually resulting in a surgical incision that was not supposed to have any actual effect) under the guise that they were being given a medical procedure that would eliminate their ailment. It was found that the belief that these sham surgeries would have an effect was the causal agent that produced the intended result of curing the patient's angina pectoris (Hurley 1991).

Some further studies would help illustrate the point. A qualitative study reported by Dr. Bruno Klopfer is most illuminating. A patient of his who suffered from severe cancer demanded that he be given a new drug, which had been promoted as a so-called miracle cure in a scientific journal. After a single dose, Klopfer reports that the man's cancer "melted like snowballs on a hot stove" (Hurley 1991, 30). The man was healed of his cancer and returned to life as normal. Unfortunately, the patient became aware of studies that attacked the efficacy of the miracle drug, and suddenly, his cancer began spreading again. He returned to Dr. Klopfer, who (acting from a hunch) told him not to believe those studies and gave him another dose of the drug, claiming that they were an "improved" dose. The patient's cancer once again receded, and he began to recover, until he read another scientific journal in which the miracle drug had been conclusively proven as ineffective on cancer. Several days later, the patient passed away (Hurley 1991, 29–30).

Another study at a hospital found the following remarkable results: a ward of pregnant women was selected for a study testing the effectiveness of the placebo effect. Pregnant women, as some may know from hearsay or personal experience, are prone to bouts of morning sickness, nausea, and vomiting. They were told by the experimenters that they were going to be given a medicine that would help deal with morning sickness, but were instead given syrup of ipecac, which is one of the most powerful substances used to induce vomiting in humans. Thus women predisposed to nausea were given a nausea-inducing agent but were told that it was actually an antinausea medicine. The experimenters fortunately found out that the belief that syrup of ipecac would counter morning sickness overcame the actual physical effect the substance was supposed to evoke (James Jones, personal communication).

If belief not only contributes to the biological effect of a pill, but can also counter the purpose of a substance, while creating another effect altogether, what can be said of belief itself? This question ties in more directly with our concerns regarding religion and the healing experiences reported in the Gospels. Sternberg writes that at least some of the effects on health of religious activities, such as prayer or faith, must come from the placebo effect. In other words, "however the placebo effect is brought into action, whether by

making a prayer or by believing in a pill, once in play, it acts through well-defined nerve pathways and molecules—molecules that can have profound effects on how immune cells function. A part of prayer's effect might come from removing stress—reversing that burst of hormones that can suppress the immune cell function" (Sternberg 2000, 169).

Here we find a theme that relates to Capps's (2000, 2004, 59–70) contention that one of the key elements in Jesus' healings was the creation of a transformative narrative that removed anxiety and stress from the lives of the afflicted. Bringing together his psychoanalytic theory with this psychoneuroimmunology research, it becomes highly probable that healing illness by removing anxiety and stress can have a curative effect on disease. By removing stress and anxiety, it is possible for the hypothalamic-pituitary-adrenal connection to relax its creation of immune-suppressive hormones and allow for the immune system—and the whole person—to return to a stable biological balance.

There is further evidence that elaborates on the effects of belief and prayer. Not only has it been shown that they have a balancing effect on the body by removing stress and returning it to homeostasis, but there is also evidence that argues for what might be termed the positive effects of faith. It is now generally understood that there is a physiological phenomenon that is a mirror image to the stress response. While the stress response is a negative feedback mechanism that keeps the immune system from devouring itself, Benson's "'relaxation response' is a stereotypical physiological response made up of a cascade of nerve chemicals and hormones" that deliver a variety of "soothing molecules [that play] a role in healing" (Sternberg 2000, 171). Essentially, faith and prayer have the capacity to trigger this relaxation response, which serves a role not only in counterbalancing the biological effects of stress, but also in negating its long-term effects.[3]

This research is not without controversy, however, as to how the placebo effect interacts with the various physiological pathways between belief and health. Although from the perspective of this study, healing illness can treat or even cure disease, there still remain questions regarding the specific ways in which the placebo effect functions and what is needed to trigger it. Although some pathways, such as those related to pain and endorphins, have been mapped out, there are still many processes that remain generally unknown (Hurley 1991, 29, 31). Although the stress and relaxation responses are thought to play a role in belief and its effect on disease, little is known on how—for example—believing that taking a pill or performing a prayer can treat or cure a patient of cancer.

One of the theories formulated to help explain some of the conditions necessary for the placebo effect is the *conditioning theory*. The conditioning theory asserts that an important factor affecting whether the placebo effect takes place is the extent to which a person has learned to have faith—the

expectation that an effect will take place if it is believed to take place (Stewart-Williams and Podd 2004). In discussing conditioning, this theory posits that the meanings learned from cultural, social, and religious environments are crucial to the placebo effect (Barrett et al. 2006).[4]

Consider the case mentioned earlier of the cancer patient who believed in the miracle cure. Because of cultural and social factors, the patient must have believed that if scientists, who are generally idealized in modern Western society, said that a particular drug was the perfect cure for his cancer, then it must be true. The patient may have been *conditioned* to *expect* the medicine to elicit a certain result—to cure him of his cancer. Conditioning, then, may have been crucial to the formation of his worldview: he must have learned that scientists strive to find real cures that actually work. Thus, although the drug was proved in the end to be inert, his belief that it would help him initially cured him.[5] Unfortunately, when that belief was violated, and his worldview and so-called faith were challenged, the cancer returned and took his life.

If, through faith, an individual in the modern era can be healed by a pill that was biologically useless, what can we say about individuals in the ancient world who had learned—who had been conditioned to believe—that holy men, prophets, charismatic leaders, or messiahs had the power to heal their bodies? Considering the environmental cues discussed earlier through the works of historical Jesus scholars, would the conditioning present in the first century have made the ancients more prone to experience the placebo effect? Healing of mind and body . . . through faith? Can we call these healings miracles?

THE QUESTION OF SUBJECTIVITY AND OBJECTIVITY AND A SOLUTION VIA DAMASIO AND D. W. WINNICOTT

If it is true that healing illness can cure disease, and that Jesus' words and deeds could have had the effect of producing psychophysiological relief on those around him, then what should we term these acts? Healings? Miracles? Crossan's argument that a miracle is a spectacular event or deed that is interpreted (1998, 303) "*as a transcendental action*" seems to place it within the realm of personal interpretation and subjective experience. Borg's argument, that we must recognize that individuals like Jesus or Apollonius portrayed themselves and were experienced to be people through whom otherworldly power operated, seems to express a desire to validate the reported experiences as real and not reduce them to simple subjective interpretation. One is concerned as to what extent Borg may concede these experiences of miracles a place in the realm of the objective. It is at this juncture that I intend to bring together the neuroscience research of Damasio (2003) and the psychoanalytic

theory of Winnicott (as cited in Jones 1991) to discern a solution that may take us beyond this subjective-objective impasse regarding miracles.

For Damasio, feelings are perceptions comparable to other perceptions such as the visual system. Light comes in from an external object into our retinas and forms an image on our sensory maps. Likewise, feelings also have an object at the origin of the process: the body. As argued earlier, an aspect of emotions lies in their physical correlates in the state of the body. The state of the body is then represented in the brain as neural mappings of the different emotional states. These body maps are crucial in the experience of feelings, which are the perceptions of those bodily states. Apart from being linked to the internal state of the body (emotions), feelings are also connected to what Damasio calls the (2003, 91) "emotionally competent object" that initiates "the emotion-feeling cycle." An emotionally competent object could be the sight of a breathtaking panorama (such as a seascape or delicate forest) or a loving partner, or even belief in a person or institution. These emotionally competent objects can lead one to experience emotion, which is then mapped in the brain to produce the experience of feeling. Unlike other perceptions, such as sight, feeling plays a powerful role in the transformation of both the internal body state and the external emotionally competent object.

Damasio writes (2003, 92), "You can look at Picasso's *Guernica* as intensely as you wish, for as long as you wish, and as emotionally as you wish, but nothing will happen to the painting itself. Your thoughts about it change, of course, but the object remains intact, one hopes. In the case of feeling, the object itself can be changed radically. In some instances the changes may be akin to taking a brush and fresh paint and modifying the painting."

In modifying the emotionally competent object—in this case, by painting over parts of a Picasso—one also modifies the emotions and physical states existing within the body. After our masterpiece has been modified, our emotion may change from dissatisfaction to satisfaction with the finished work, which is then experienced as the *feeling* of completeness and renewal. In this sense, then, by transforming the external, the internal is also transformed. Damasio writes that we perceive (2003, 92) "a series of transitions. We sense an interplay, a give and take" between the subjective internal experience and the objective external world.

We find a similar discussion on the interaction and transformation of the internal and external worlds in the work of the psychoanalyst D. W. Winnicott (as cited in Jones 1991; see also Jones 1996, 106–26, 2002, 82–85; Winnicott 1971). Winnicott (as quoted in Jones 1991, 57), whose work has proved pivotal in the contemporary psychology of religion, opposes the rigid dichotomy of the subjective and the objective worlds, arguing for "an intermediate area of *experiencing*, to which inner reality and external life both contribute . . . [an area that serves in] keeping inner and outer reality separate yet interrelated." Winnicott names this area the *transitional space*, which

gives an individual the capacity to engage in what he calls *transitional experiences*. These experiences, he argues, are "always on the theoretical line between the subjective and that which is objectively perceived" (Winnicott, as quoted in Jones 1991, 59). This area of play is "outside the individual, but it is not the external world." It is where a person "gathers objects or phenomena from external reality and uses these in the service of some sample derived from inner or personal reality" (Winnicott, as quoted in Jones 1991, 59), which inevitably transforms the external phenomena by infusing them with a plethora of meanings, feelings, and affects. Winnicott (as quoted in Jones 1991, 59) notes that there is a type of precariousness in the transitional experience in "the interplay of personal psychic reality and the experience of control of actual objects. This is the precariousness of magic itself, magic that arises in intimacy, in a relationship that is found to be reliable."

Bringing Damasio and Winnicott together, I would argue that a miracle is a certain type of transitional experience, where the subjective and the objective are entangled in an ongoing drama of mutual transformation. This definition of miracles and our use of Damasio's research are especially relevant to the discussion of the healing miracles present in the Gospels (as well as in other ancient writings). As we have shown with the work of Sternberg, emotions and beliefs can play a powerful role in health and disease. The logical result, as we have shown, is that healing illness (defined as the *subjective*, psychological, and social interpretations of disease) can cure disease (defined as the *objective*, empirical physical condition).

It seems salient, then, to argue that the healings reported in the Gospels involve the manipulation and transformations of the subjective meanings that were attributed to disease (healing illness, as Pilch and Crossan posit) as well as the transformation of the objective physical ailment and the body's condition (curing disease). Hence we notice an interplay between the objective and subjective spheres, which, for Damasio, forms part of the emotion-feeling cycle and, for Winnicott, forms the building blocks of the transitional experience. Our conclusion, then, is that a miracle is a particular type of transitional experience, where subjective internal worlds and objective external worlds both contribute.

AN ILLUSTRATION: JESUS AND THE CAPERNAUM PARALYTIC

We will now more concretely illustrate our model for the study of the healing miracles in the New Testament Gospels. We will use the story of Jesus' healing of a paralytic as a test case. I present the following narrative from the book of Mark:

> A few days later, when Jesus again entered Capernaum, the people heard that he had come home. So many gathered that there was no room left, not

> even outside the door, and he preached the word to them. Some men came, bringing to him a paralytic, carried by four of them. Since they could not get him to Jesus because of the crowd, they made an opening in the roof above Jesus and, after digging through it, lowered the mat the paralyzed man was lying on.
>
> When Jesus saw their faith, he said to the paralytic, "Son, your sins are forgiven." Now some teachers of the law were sitting there, thinking to themselves, "Why does this fellow talk like that? He's blaspheming! Who can forgive sins but God alone?" Immediately Jesus knew in his spirit that this was what they were thinking in their hearts, and he said to them, "Why are you thinking these things? Which is easier: to say to the paralytic, 'Your sins are forgiven,' or to say, 'Get up, take your mat and walk'? But that you may know that the Son of Man has authority on earth to forgive sins. . . ." He said to the paralytic, "I tell you, get up, take your mat and go home." He got up, took his mat and walked out in full view of them all. This amazed everyone and they praised God, saying, "We have never seen anything like this!" (Mk 2:1–11, NIV)

The first observation that might be taken from the vantage point of our model involves a conjunction of the historical and environmental considerations discussed previously and the theories of conditioning relevant to the placebo effect. Since we are discussing the era of first-century Palestine, we are speaking of a time when it was commonly believed that certain persons (sorcerers, prophets, magicians, priests, etc.) could work great wonders of miraculous healing. This Weltanschauung implies that the people of this time were conditioned to perceive the world in such a way. In this story, the people actively seek Jesus; some seek to hear his message, while others (like the paralytic and his friends) seek healing. The paralytic in this story, then, must have had faith in Jesus, believing that he could cure him of his malady. The most obvious proof of this conviction is how persistent and ingenious the paralytic and his companions were in getting through to see Jesus—by point of digging a hole in the roof of the house and lowering him toward Jesus.

The second observation also involves historical context but also aspects of the illness–disease continuum of medical anthropology. Jesus notices the great faith that the paralytic and his companions must have had as they lowered him into the house. Jesus also noticed that the paralytic was suffering from a physical malady, which, like many diseases of the day, was probably correlated with the person's cultic and religious failure. It was a commonly accepted theology in the ancient Near East that God (or the gods) punished sinners with catastrophe and disease and uplifted the righteous with good health and just rewards. Hence, instead of simply proclaiming that the paralytic is cured, he declares, "Your sins are forgiven."

To single-handedly transform the meaning of the person's condition from one of sinfulness (and disease) to one of redemption (and hence good health)

by forgiving sins was probably not what was expected from Jesus. If there were a natural remission of the paralytic's condition, one might have assumed that God had forgiven his sins. In this scenario, the remission of the disease would have led to the remission of the illness. But what we have in this passage is Jesus treating the *illness* directly, which would have been assumed to have an effect on the person's physical condition.

This act on Jesus' behalf leads to a debate with the scholars of the Jewish law present, and also to our third observation. It is perhaps not unlikely that the scholars' doubts would have affected the paralytic, if he himself did not question Jesus' authority. "How indeed," the paralytic might have thought, "could Jesus declare my sins forgiven if only God could do such a thing?" Jesus critiques the presumption of the scholars concerning his authority in declaring the paralytic's sins forgiven. By standing up to their critiques, Jesus portrays himself as someone with competency and authority; hence "the Son of Man has authority on earth to forgive sins." It is after asserting his authority that he turns to the paralytic and tells him to "take your mat and go home." At once, the paralytic "got up, took his mat and walked out in full view of them all."

The issue of authority here is relevant because of Jesus' role as a healer. It has been found that one's trust in a physician's (certainly a type of healer) authority and ability is a mediating variable of the placebo effect (see note 6). Also, trust is a crucial factor that is necessary to engage in the transitional experience (Winnicott 1971). By asserting his authority, Jesus—as Borg notes—presents himself as someone who could be trusted to operate such otherworldly authority (Borg 1994). It was then that the healing as a whole was probably complete.

By transforming the meaning-state of the person through the forgiveness of sins, and by asserting his authority as a healer, Jesus cured him of his paralysis. This transformation of meaning and healing of illness, we argue, triggered a placebo effect, which produced the curing of the disease and transformation of the person's self. The specific biological pathways through which such a process took place are probably related to the psychoneuroimmunological factors of anxiety and the functional aspects of belief discussed previously. Within the model put forth in this chapter, the ex-paralytic had indeed experienced a miracle, defined as a particular type of transitional experience, where the subjective and objective both played a role in the healing.[6]

CONCLUSIONS

This chapter has sought to bring the tools of neuroscience, psychoneuroimmunology, and psychoanalysis as interpretive lenses, read one atop another, to bear on the questions related to the healing miracles in the New

Testament Gospels. Historical Jesus scholarship as well as insight from medical anthropology and psychology have been brought together to conclude that (1) emotions and beliefs can play a powerful role in the triggering and healing of disease and that (2) the evidence from the New Testament reports that Jesus healed individuals' physical bodies as well as their psychological states, which leads to the integration of both conclusions to argue that (3) the historical Jesus probably did trigger such healings in those around him. Subsequently, we have argued that these healings should be understood as miracles, insofar as miracles are understood under the lens of Winnicott's concept of the transitional experience, where both inner and outer worlds interact.

Future venues of research should consider new studies from psychology as well as anthropology and set forth to reexamine or outright reject aspects of this chapter's arguments on account of new evidence, insofar as their conclusions on issues such as the placebo effect or the research on the interaction of belief and health prove contrary to those reviewed here.

Here I have sought to outline a general framework from which to understand the healing miracles in the New Testament. Future studies, then, might profit by using this general framework in a more specific inquiry on the nature of Jesus' healing ministry such as the types of meanings of illness that were transformed and the reported effect on a person's physical condition, or how healing others had an effect on Jesus' own personality and beliefs.

The personal hope of the author, and his greatest desire as far as future research is concerned, is that the discussion of psychology and medical anthropology presented here be extended in further studies. Another proposal for further study is that the psychological models and arguments presented here be used in the study of other healing figures of the ancient world such as Apollonius of Tyana or the Buddha. I think it would be profitable to discern exactly how much of the healing miracle traditions of other figures in the ancient world may be read under the lens of this chapter. Of course, this would naturally extend beyond biblical studies and into classical studies as well as all sorts of enterprises of history, particularly in relation to religion.

What would the purpose of such psychohistorical research on religion be? What would we gain intellectually, aesthetically, and scientifically from such an endeavor? In discussing the apparent gap between the ancient and modern worlds in regard to disease and health, Crossan (1998, 293) writes,

> I speak of Jesus and his companions as healing others. What exactly did that mean for them, and what does it mean for us in engagement with them? I am not satisfied with explanations that say something like this: those ancient people had strange or even weird ideas, but we must just accept and describe them. Or this: they have a right to their superstitions and we must not disparage them. When explained like that, no ancient ideas can challenge us.

> They simply confirm our superiority and our more adequate knowledge of how the world works. . . . They talked about evil spirits and demonic forces responsible for sickness and death. We speak of sanitation and nutrition, of bacteria and germs, of microbes and viruses. How are they not wrong if we are right, and vice versa?

Although Crossan's language here seems more reified (either they are totally wrong and we are right, or they are totally right and we are wrong), I agree with his general sentiment. Our systems of health generally do not speak in terms of spiritual forces, and the ancients' systems of health did not generally speak in terms of biological forces. Sometimes this fact leads us to bat aside the ancients' views on health as the preposterous products of illusions. In rejecting their views outright, however, we may become guilty of medical ethnocentrism. Perhaps, in the past, this attitude may have been permissible due to lack of research, but with more studies revealing the regulatory role of beliefs and behavior in disease, it has now become untenable, highly uncritical, and unscientific.

By assessing the effectiveness and function of ancient medicine, we challenge ourselves to move beyond our modern hubris and better understand the ways of our ancestors. By challenging ourselves to do this, we also challenge them by asking, What is the nature of your cure, and what is the meaning of your disease? How did you survive without our science, and how did you suffer without it? This process is also reciprocal since by challenging the wisdom of the ancients, we also invite them to challenge *us*. How far has our science led us away from their ways? How has this new knowledge changed the way we view health? In what ways have we made progress toward bettering society? In what ways has our progress proved *detrimental* to society's mental and physical health?

These are difficult but wonderfully intriguing issues, and one suspects that the best way to answer them is by looking back through history with all our available scientific tools and data and emphatically ask these questions. By challenging our ancestors as well as ourselves, we may yet stir up resources for the development of more holistic, comprehensive, and pragmatic models of human health.

NOTES

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1. By expanding the repertoire of our hermeneutical tools to include not only anthropology, but also psychology, we follow Rollins (1999). See also Kille's work titled *Psychological Biblical Criticism*, in which he declares that it is his (2001, 92) "fundamental premise" that "the Bible is to be seen as part and product, not only of a historical, literary, and socio-anthropological process, but also of a psychological process." Ellens warns that biblical studies cannot afford to ignore the use of psychology as an interpretive tool, or else (Ellens and Rollins, 2004, Vol. 1, 284) "it is not adequately serious about itself."

2. For a review of historical Jesus research in general, see Borg (1994), Powell (1998), and Tatum (1999).

3. A seminal volume on psychoneuroimmunology and the positive effects of religion on health can be found in Koenig and Cohen (2002). In regards to religion's capability to counter the harmful effects of stress, Ellens provides a psychologically and theologically informed discussion of the history of religion as the (1982, 59) "history of the human endeavor to devise functional anxiety-reduction mechanisms capable of managing situational and systemic angst."

4. A pharmacological treatment of the conditioning theory of the placebo effect can be found in Ader and Cohen (1975). Moerman (2002) argues that a better understanding of the placebo effect (which he terms the *meaning response*) is to see it as a manifestation of people's meaning-making capabilities, and how that ability to make meaning relates to the biological processes involved in healing via placebo.

5. Shapiro and Shapiro (1997) write concerning the relationship between a patient's expectation about treatment outcomes, the patient's attitude toward the attending physician, and the probability of a placebo effect. Their research has shown that "positive placebo responses are likely if patients have positive expectations about treatment, as reflected by their guessing that the placebo stimulus is a relevant, active drug for their symptoms, and not a placebo. . . . Positive placebo response is also related to a general positive attitude to the physician, who is seen as likeable, attractive, and competent, reflecting positive expectations that he or she would be helpful" (Shapiro and Shapiro 1997, 226). They have also noted an interesting cultural phenomenon, in which susceptibility to the placebo effect increases when patients are offered "a pleasant atmosphere at a prestigious psychiatric clinic" (Shapiro and Shapiro 1997, 227). This may imply a certain degree of idealization concerning health facilities and their perceived efficacy and authority. In other words, one may presume that better treatment will be received at the Harvard Medical School than if one attended the local health center. This perception and expectation could be seen as a mediating factor in placebo effects.

6. It is important to note that this passage was used solely for illustrative purposes. Although this psycho-bio-social-spiritual midrash did take into account the two-source hypothesis by employing Mark's version of the story instead of Matthew's or Luke's, which are seen as derivative of Mark's, it is limited concerning its historical reliability since it did not take into account textual-critical problems such as the issue of textual redaction.

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CHAPTER 8

The Phenomenology of Transformation and Healing: The Disciples as Miracle Workers and Other Biblical Examples

Anthony R. De Orio

There are several needs within the field of psychology that, potentially, can be fulfilled by a psychology of healing and transformation. Our understanding of pathology and how it begins, sustains, and links with other comorbid issues is immense. However, an in-depth understanding of what the markers are for healing and transformation is significantly lacking. How do people get better? What brings about a new horizon and transformation? Who is involved? How deep can transformational change go? What is so healing about healing? When is healing miraculous in the popular sense? When is healing a miracle in a scientific sense? The phenomenology of healing, of why/how people turn the corner from brokenness to wholeness, can be demonstrated, giving light to the process of how humans change.

Second, the field of psychology must take seriously healthy change processes that include the dynamics of religion and the humanities. These subjective domains of faith are an inescapable part of human existence. Understanding psychologically healthy healing experiences, including religious ones, can broaden our concept of wholeness both psychologically and spiritually. Religious experiences are, in part, humans (and God) helping other humans to change. The inescapable fact that we help create change with each other is universally noted in virtually every field of literature. The human mind is unmistakably interpersonal. In addition, we impact each other through the use of symbols, self-reflection, and human emotionality. Change comes about through affect, how we relate to each other, and our personal values. Thus any model of the phenomenology of healing must take seriously how religion and spiritual experiences can transform people (Mahoney 1991, 263).[1]

Moreover, a model of transformation lays the groundwork for discernment when people go off course in their religious beliefs and practices. Is religion pathological, stultifying, or compassionate, grace giving, and inclusive? Third, a robust model of transformation is needed to bring together the objective domains of science and the subjective domains of human knowing under one roof (Siegel 2006[2]; Gould 1998[3]). What keeps us from being able to do this? On the negative side, according to Gould, the two domains of science and humanity under one roof is a hard sell for a number of reasons. First, he was correct in his notion that dichotomous thinking has been a bad habit; namely, there has been a false fear that by advancing science along with its reductionism and materialism, the entire range of disciplines called the humanities would be undermined.

Furthermore, this dichotomous thinking has generated a judgmental and rigid ranking of deadly metaphors, for example, good versus evil, male versus female, or culture (and nurture) versus nature. With these acidic metaphors on the skin of the scholarly landscape, there has been much potential for dissonance as well as the reality of false battle lines being drawn between various camps of the sciences and the humanities. In addition, much of the false warfare between science and theology exists precisely because of this bad habit of dichotomous thinking and rigid metaphors, for example, God as creator versus evolution. Both sides on the intellectual landscape distrust each other.

However, on the positive side, transformation and healing where nothing is ever the same again in a person's life can be understood more clearly when all spheres of a person's life are taken into consideration. The model of healing presented subsequently does this in several ways. First, the emphasis on meaningful, secure, and compassionate attachment with someone else who is empathic and not dismissive will aid the change process. Second, the natural sciences, the humanities, and religion are allowed full voice in the transformative process. Third, the objective domains of science and the subjective domains of human knowing under one roof means understanding what types of processing may be peculiar to the different hemispheres of the brain. The left hemisphere (objective domain of science) and the right hemisphere (subjective domains of human knowing—including religion) and their integration within the individual are critical for health and transformation.

The emphasis on not discounting the brain's right hemisphere mode of processing—the nonlinear, visiospatial-analogic, and holistic (autobiographical information, emotional history, mind sight, intense and raw emotions, sending and perceiving of nonverbal signals, awareness, regulation, and integrated map of the body)—coupled with the brain's left hemisphere mode of processing—linear, logical, and linguistic-digital (syllogistic reasoning, linguistic analysis, right vs. wrong thinking)—creates new windows for understanding the phenomenology of healing (Siegel 2003, 22; Siegel and Hartzell

2003).[4] The phenomenology of healing that will be explicated shortly emphasizes the brain's right hemisphere and the *explicit* contribution it makes to transformation. Moreover, the brain's left hemisphere and its contribution are *implied* in the model that will be presented in this study.

The cohabitation of the objective sciences and the natural sciences, illustrates a consilient movement that ignites the possibility of both integration and mutual enlightenment between them. This consilient approach across various fields of knowledge and scholarly disciplines is long overdue and is now taking place (Mahoney 1991, 2003).[5] The model of psychological transformation presented here is a framework of the phenomenology of healing that joins various fields of scholarly disciplines. The schema summarized here is accelerated experiential-dynamic psychotherapy (AEDP; Fosha 2000). This model describes the process and experience of healing and transformation. The aim of this affect-centered therapy is to harness the patient's own ability and resources to heal within a supportive interpersonal environment. An explanation and summary of Fosha's work follows, which includes supportive bodies of theory and research on affective change processes, the experience of transformation itself, and core state and truth sense (Fosha 2000, 2004, 2005, 2006; Fosha and Yeung 2006).[6]

RIVERS OF RESEARCH FOR TRANSFORMATIONAL TREATMENT

Several domains of scholarly research generated a psychology of transformation and healing. These four main areas and bodies of research are substantive and vast. First, affective neuroscience and emotion theory offered how our core emotional life creates change. This research demonstrated how these core emotions, or more accurately, *categorical emotions*, constitute biological universal phenomena initiating from within different regions of the brain. These categorical emotions are marked by an empowerment for change, transformation, and being able to adapt to what life may throw at us. This empowerment is launched when these categorical emotions are given full expression and are experienced not just in one's head, but in one's physical body.

Second, the scholarly domain of attachment theory and moment-to-moment mother-infant interaction from the hard work of clinical developmentalists demonstrated how resilient and wholesome development originated between caregiver and child. The experiences of being in touch with, on the same page with, understanding the child's feelings led to transformation. This emotional coordination between mother and child created healthy change and brain states of optimal growth and learning.

Third, somatic (body)-focused and emotion-focused experiential traditions demonstrated how one is changed through a shift from the head (cognition) to in-the-body sensing and feeling. This shift releases natural healing processes

rooted in the body's self-righting adaptive tendencies. In simpler words, there is a built-in disposition to heal. Not a deterministic biological reality, but wired-in capacities that yield a range of choices for the individual that ignite transformation.

Fourth, taking seriously and exploring natural history proved to be a rich mine of diamonds for understanding the phenomenology of healing and creating AEDP. The intense emotional experiences of spirituality and religious conversion, romantic love, authentic I-thou connections, and emotional surrender aided the understanding of transformation. This body of research proved to be insightful as to how individuals repair ruptures. Thus these processes of sudden and surprising emotional experiences can generate solid as well as lifelong changes.

Transformation and Affective Change Processes

The research areas previously discussed demonstrated empirical evidence of some of the pathways through which healing processes involving emotion, connection with others, and the experience of emotion in one's physical body led to deep, transformational change. The central assumption of AEDP is that the ability to process experience, together with an understanding other, will generate change, healing, and transformation. This process of healing transforms the experience, the self, and the other person.

Furthermore, AEDP considers change within three major themes. First, change can happen not just gradually, but also in a sudden, rapid, and discontinuous sense. If bad trauma is able to generate a quantum change where nothing is ever the same again, then transformational processes for healing can generate quantum leaps for the good. Second, the line between trauma and healing is a thin one. On one side of the line, there is fear and disruption of one's expectations, and on the other side, there is growth enhancement, curiosity, and excitement. How we respond and deal with intense emotions from life's crises—as rigidly closed or eventually as open and growth enhancing—makes all the difference. One major factor of how one will be able to feel and deal with overwhelming emotion is determined by the presence or absence of a trusted other. If I am alone or with a trusted other in the midst of an emotional tornado, my response can tilt toward constriction and withdrawal or expansion, healing, and learning. Third, AEDP seeks to explore the *experience* of change as a change process itself. As a person is able to self-reflect on experience and the experience of change, this reflection can become a transformational process of its own. Through the waves of experience and reflection, this process is transformational, if it occurs within the confines of a secure attachment with a trusted other, if it is monitored how the process of change manifests itself in a person's body, and if it is worked through to a place of fulfillment and completion.

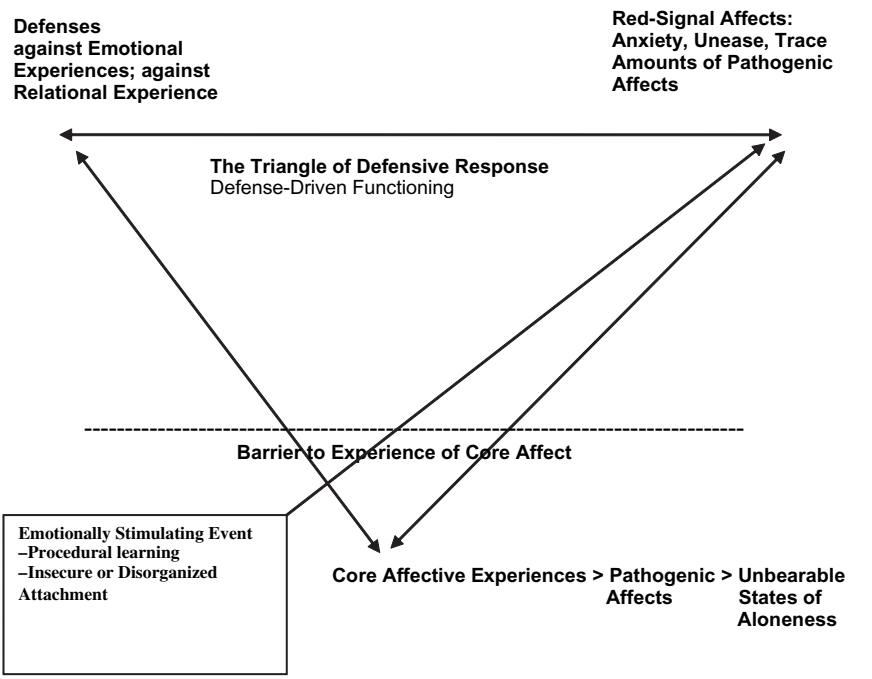
Self-at-Worst and Self-at-Best: Two Representational Schemas of Accelerated Experiential-Dynamic Psychotherapy

Chronic rupture or timely repair indicates whether a person will move toward psychopathology or transformation, respectively. When the emotional environment fails to provide support, psychic development goes off the road. Attachment bonds, the way we connect with others, can hinder or help regulate overwhelming emotional experience. If the caregiver's emotional competence is compromised, another wave of intense emotions with pathogenic affects of fear, shame, and distress are generated. The attachment bond is disrupted, generating a third wave of affects: the unbearable emotional state of aloneness. This third wave is a bottomless pit of trauma—feeling helpless, worthless, empty, and broken—where the individual will go to great lengths to avoid ever having these feelings. This is the self-at-worst, where procedural learning activates so-called red-signal affects. The individual will exclude defensively any direct experience of basic emotions. Defenses are used to avoid the chaos wreaked by emotions that cannot be managed or regulated and to maintain the attachment bond with the other person at all costs. Short term, this helps the person survive. Long-term, dependence on these defense mechanisms exhibits personality distortion, phobias, depression of all sorts, poor and compromised functioning, and eventual emergence of psychopathology.

For example, the parable of the lost son (Lk 15:11–32, New International Version [NIV])[7] illustrates the self-at-worst and the self-at-best functioning (Fitzmeyer, 1981). The two sons in the story exhibited pathological behaviors. The younger brother was out of control, and the older brother was overly controlled. They depicted either high-risk behaviors or a cemented rigidity, respectively. Both sons highlighted the red-signal affects against authentic relationships, whereas the waiting father exemplified openness and compassion in the midst of life's turbulent times, which generated an environment of healing. He demonstrated boundaries that were appropriately adaptable and flexible.

The self-at-worst and the self-at best functioning (see figures 8.1 and 8.2) illustrate and summarize the main concepts of being closed or open, stuck or growth enhancing. AEDP understands that there are, side by side, both psychopathology and healing processes existing within each individual. The emotional environment of interpersonal relationships can contribute to one or the other. Emotionally thwarting or facilitating conditions will activate the respective condition. Both of these figures will aid a conceptual look into the phenomenology of transformation as it is described subsequently.

Figure 8.1 Self-at-Worst Functioning



Dynamic Sequence of Categories of Experience Leading to the Triangle of Defensive Response

Core Affective Experiences (Primary Affective Reactions) > (grief, joy, longing, rage, love, sexual desire, experiences of intimacy and closeness, attachment strivings, true-self states, vulnerability, in sync states of affective resonance, core state of relaxation, openness, and clarity about one's own subjective truth)

Negative Receptive Experiences > (feeling hated, dismissed, criticized, or abandoned; experiencing oneself and one's affects as objects of contempt, discomfort, revulsion, pain)

Aversive Affects (Secondary Affective Reactions) > (fear, shame, emotional pain, feeling alone, primary depressive reaction: helplessness, hopelessness, and despair)

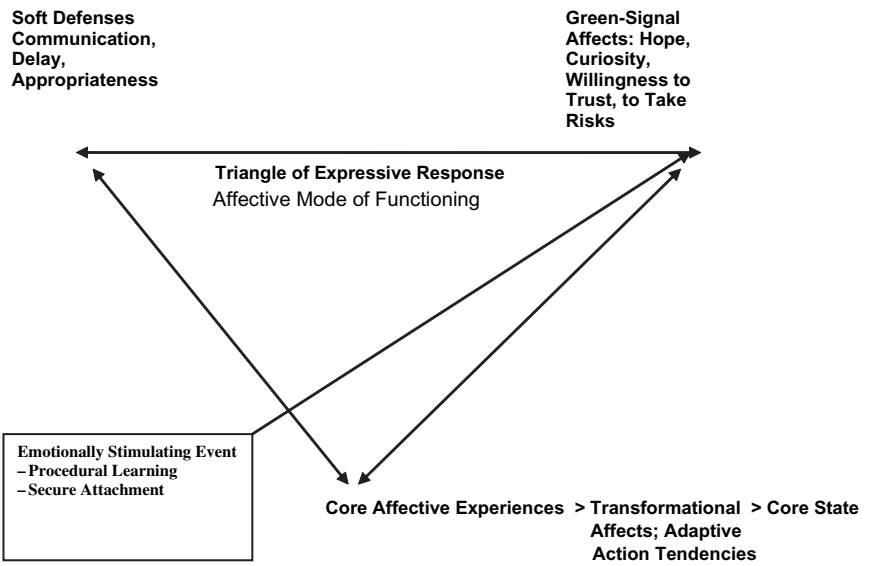
Red-Signal Affects > (anxiety, shame, fears [of loss, helplessness, loss of love], affect phobia, pain phobia)

Defenses > (formal defenses, tactical defenses, nonverbal defenses, defensive affects)

Consequences of Triangle of Defensive Response Functioning > (symptom formation: e.g., phobias, depression, panic attacks; character pathology: feeling and not dealing, dealing and not feeling; isolation, dependency, feelings of inadequacy, depression, despair)

Source: Compilation from Fosha (2000) and Fosha and Yeung (2006).

Figure 8.2 Self-at-Best Functioning



The Dynamic Sequence of Categories of Experience Leading to the Triangle of Expressive Response

Core Affective Experiences (Primary Affective Reactions) > (grief, joy, longing, rage, love, sexual desire, experiences of intimacy and closeness, attachment strivings, true-self states, vulnerability, in sync states of affective resonance, core state of relaxation, openness, and clarity about one's own subjective truth)

Positive Receptive Experiences > (feeling held, understood, appreciated, supported, loved, encouraged, helped; experiencing oneself and one's affects as acceptable, welcomed, and responded to)

Facilitating Affects (Secondary Affective Reactions) > (feeling of safety, trust, in sync states, intimacy and closeness, curiosity, excitement)

Green-Signal Affects > (hope, anticipation of pleasurable consequences, curiosity, excitement, trust, self-confidence)

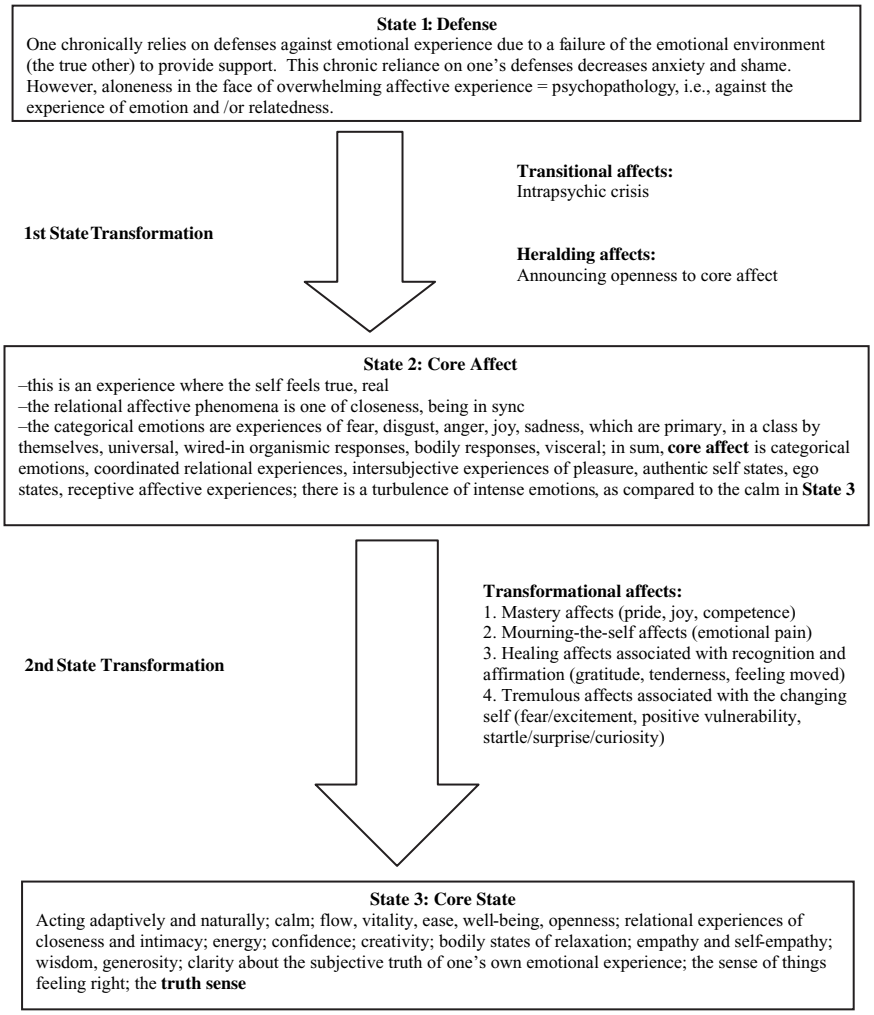
Soft Defenses > (coping strategies; social manner; defenses that can be bypassed)

Consequences of Triangle of Expressive Response Functioning > (affective competence, resilience, capacity to feel and deal, capacity to postpone)

THE PHENOMENOLOGY OF HEALING AND TRANSFORMING PROCESSES

There are three states and two state transformations that demonstrate the process of healing and the experience of healing (see figure 8.3). Under ideal therapy conditions, the therapist as caregiver can navigate and facili-

Figure 8.3 Three States and Two State Transformations of the Healing Process (See Fosha 2006, 571, under "Quantum Transformation")



tate with the patient all three states and both state transformations. In the first state, the patient can utilize unconsciously various cognitive, affective, and behavioral strategies to exclude emotional experience. The therapist, as an unwavering, protecting, nurturing other, acts collaboratively with the patient to bypass this defensive wall. This will provoke an intrapsychic crisis (first state transformation) and heralding affects, which announces the entrance into state 2.

The signal of state 2 is the visceral experience and expression of core affective experiences. The therapist is a safe base, where the patient can experience intense emotions and not be alone. This therapeutic dyad is able to repair the disruption in attunement, which further deepens the therapeutic process. What is important is the effectiveness of the repair. Disruptions are short-lived, and the achievement of restoration creates a movement toward state transformation.

Repair and movement within state 2 releases a second state transformation of adaptive action tendencies. Authentic relief from intense negative experiences, rather than mere defensive avoidance and going in circles, is demonstrated by a deep sense of joy and life. The patient feels cared for and understood, which gives rise to more healing affects. From core affect (state 2) to core state (state 3) is the next wave. In state 3, the person feels authentic: "I am at home with myself," "I feel like myself." The patient experiences closeness, intimacy, compassion, and often deep spiritual experiences of being in touch with ultimate realities and eternal truths. Here AEDP crosses a boundary and integrates psychology with the roots of spirituality and aesthetic experience. At this juncture, the therapist can act as a validator, being present, or an active participant.

The *True Self*—and its counterpart, the *True Other*—as articulated in the transforming process of AEDP is not an idealization. AEDP theory believes that there is no such thing as a True Self. However, there is an *experience* of the True Self, along with—for that moment—a True Other. When a person feels known and understood, seen and helped, and not interpreted or dismissed, the True Self is experienced. The other person, in the lived moment, responding in just the right way to a person's need, becomes, on that occasion, a True Other:

> The True Other is an external presence who facilitates our being who we believe ourselves to be, who we are meant to be, someone who is instrumental in helping to actualize a sense of True Self. (Fosha 2005, 530)

This does not mean a just-in-your-head or cognitive conclusion on the part of the one who feels understood. The experiencer knows this from a sense of something (truth sense) that comes from deep within his or her heart and soul. The True Other is deemed so by the experiencer because of the responsiveness to a need, not because the True Other is perfect or unchanging, but an imperfect human being. True Self and True Other experiencing takes place in a state of deep emotional and interpersonal contact. Figure 8.3 captures the emotional change process and the experience of the change process to completion.

The summary of Fosha's work is complete. To utilize her title, the transforming power of affect is a model that holds promise as a lens through

which the powers of religion as healing and transformative can be observed. These observations will lead inevitably to greater depths of discernment to ascertain when religion is rigid and chaotic or generating movement toward wholeness and grace. But what exactly is the bridge that will connect AEDP's phenomenology of transformation and healing with the biblical texts on healing, transformation, and miracles? The answer, in part, is contained within our understanding of *miracle* and the parallels between these two systems.

THE COMING OF THE KINGDOM NOW AND HEALING

The Disciples as Miracle Workers—Mark 6:7–12, 3:13–19; Luke 6:12–16, 9:1–6

For Jesus and his disciples, (Rengstorf 1963) the coming of the Kingdom of God was a present reality. The door is opened for the realization that the grace of God, the forgiveness of sins, and the joy of salvation is here. Jesus' power (Grundmann 1964) is here to overcome evil, to heal all types of diseases, to create a new people and a new community. Visibly, miracles are part and parcel of this transformational process.

There are several main trajectories within the reality of miracles that create a bridge between the two worlds of the New Testament biblical tradition of transformation and the present postmodern tradition of healing contained in AEDP. The first trajectory is that miracles are intensely emotional, personal, intimate, and interpersonal. Miracles are God's concrete love actions in people's lives through others. These miracles through the disciples are fundamentally an expression of a transformative, helpful, safe, and supportive relationship. They signal the reality of a love relationship with and from God and with and from others, that is, an environmentally supportive dyadic environment. Miracles create and symbolize the transforming, healing power of and with the True Self and of and with the True Other. Likewise, AEDP is an intensely emotional, personal, intimate, interpersonal, and compassionate organic system. A second trajectory is that miracles are new and surprising. They are the new and surprising mode of God's activity, that is, wonders, powers, and mighty acts. AEDP explores the new ways and the surprising self-righting tendencies within the human heart when an individual comes in contact with an understanding other. Finally, Jesus and the disciples did not split their experience of the world between what can be explained through science and what was miraculous. Miracles are not ignorance about nature or insufficient enlightenment about life and science. They are not just extraordinary events in the ordinary affairs of life. Miracles are not an interference of natural law, as if *miracle* means something God did in

opposition to nature. God's sustaining activity and mighty power is one with nature at all times. The sustaining of the universe is the totality of God's activity. There is no dichotomy for God between the personal/intimate, new and surprising versus the sustaining of his universe according to the laws he has set (Robinson 2005, 160–61; Berkouwer 1952, 188–231). In the same manner, AEDP does not dichotomize the objective world of science and the subjective world of knowing. Both in the biblical world and the present one, God's personal love and surprises, along with his sustaining power, are two sides of the same coin in the phenomenology of transformation. God's person, power, and love are made manifest both then and now. Miracles for Jesus and his disciples were a reality, not a potentiality. They are God's concrete love actions in peoples' lives through others. Miracles served the new reality of the present Kingdom of God as signs indicating that guilt is removed and a new personal intimacy with God can be realized. Comfort, mercy, grace, transformation, and intimacy are the new realities for the young community with God and with each other.

The Process and Experience of Transformation Applied to the Biblical Context

State 1: Defense and First State Transformation

Within the larger context of the disciples' and people's lives, there was a deep failure of their emotional environment to provide relief of their chronic anxiety and shame. This anxiety and shame schema was exhibited through legalistic religious and social traditions that choked true relatedness to God and to others from the heart. These individuals and communities could not be themselves. Chronic reliance on one's defenses of rationalization, projection and religious intellectualization, to name a few, to cope with the unbearable shame and anxiety led to rigidity and emotional chaos. People needed a safe place, a safe other to experience and express their overwhelming feelings of guilt, shame, brokenness, loss, and pain. The religious traditions were ossified and fossilized toward a dogmatic and strict prescriptive theological calculus that left people's emotional landscape starved for nurturance, guidance, and protection. The soil was ripe for crisis, both personal and societal. Change, generated through compassion, care, and healing, was coming like a locomotive and could not be stopped.

State 2: Core Affect and Second State Transformation

The disciples defined themselves through their mission to be a safe place to find grace with God, forgiveness, and openness to new ways of being, thinking, and obeying God. They demonstrated a healing power, where they would give to others and receive them without precondition. People would

not be summarily dismissed or reinterpreted to fit rigid religious tradition at the expense of their own hearts. This healing message created an intrapsychic crisis of massive proportions. There could now be an opportunity for people to experience and communicate their categorical emotions such as fears, angers, disgusts, sadness, and joys of life. These wired-in organismic, visceral, bodily (somatic tracking) responses, through the love and power of the disciples, created a turbulence of intense emotions. People could authentically experience themselves and feel understood and received by God and the disciples. God, the disciples, and the homes they entered experienced a closeness, healing, and connection that had been previously closed out from their experience in life.

The unconditional love of God, the grace and forgiveness of sins, and the healing of diseases, infirmities, and mental and emotional pain engendered transforming affects with a cascading effect. People could authentically mourn their losses and failures; they could feel moved, tender, and grateful. As people found themselves changing, they experienced the positive vulnerability, fear and excitement, startle, and surprise and curiosity that are part and parcel of these tremulous affects. A person, through a trusted other—the disciples—could experience a healthy pride, competence, and joy. The disciples' mission created transformational affects in the villages.

State 3: Core State

Anxiety, guilt, shame, or defensiveness is absent. Burdens of disease, social ostracism, and emotional trauma and spiritual dead-end roads are lifted and relieved. There is calm (peace), ease, flow, and clarity about the subjective truth of one's own emotional experience. The truth sense—the sense of things feeling right—is evident. The True Self—"I feel like myself"—exhibited love, compassion, resilience, closeness, and openness. The people who opened their homes to the disciples felt understood, received by a True Other. As a result, they demonstrated their own generosity, empathy, and wisdom, understanding themselves at their deepest identity. They were with the disciples and the Lord, who had sent them out.

Acts 3:1–16, the Crippled Beggar Healed

State 1: Defense and First State Transformation

The daily burden of survival with severe infirmities—such as for those crippled from birth—generates some degree of fear, powerlessness, and shame. A chronic dependence on others to give as one begs in a helpless state is a lonely existence. The physical and emotional environments surrounding the beggar in Acts 3:1–16 were extremely and chronically limited. Peter, as a True Other, announces a new connection to alleviate a chronic, unrelenting ailment.

State 2: Core Affect and Second State Transformation

As Peter and John are about to enter the temple courts, they announce God's powers to a crippled man and order him to get up and walk. Peter heals in the name of Christ. This pronouncement opens the man to his core affect of pure, wired-in organismic joy. Obviously, the man's body responds not only by walking, but also by holding on to Peter and John. This visceral somatic tracking of one's healing affects is part and parcel of feeling whole. Some of the man's transformational affects included mastery affects of pride and joy, healing affects of gratitude and feeling moved, and the tremulous affects associated with the changed self, where there is startle, surprise, curiosity, and positive vulnerability to hearing the new message of forgiveness and the resurrected life from Peter and John. A new day has dawned for the receiver.

State 3: Core State

The phenomenology of well-being, of openness with new relational experiences of closeness and intimacy, is evident in the healed man. He praises God and embraces the disciples. There is clarity from deep within about the subjective truth of his experience. He knows that his sense of life feels right—the truth sense. There is an energy and vitality that are unmistakable.

Biblical Religious Affections and Transformation

Jonathan Edwards (1834; hereafter JE) attempted to present a phenomenology of religious affects from the biblical data. *A Treatise Concerning Religious Affections* attempted to demonstrate what were authentic, transforming, and true religious affects within the individual. But why is this work particularly relevant to our discussion on the phenomenology of healing? There are several reasons for choosing this work. First, JE's analysis is unique. There is really nothing quite like his discussion about biblical transformation for its time. The "theological conceptual home base" that generated his model stemmed from a presupposition of God's grace. Obviously, this does not mean that one would have to agree with all of the finer points and conclusions within his rationalistic Calvinism. Second, the author excavated the biblical data about authentic transformation through autobiographical and biographical portraits. These sketches about religious affects were illustrative of bottom-up processing as well as the brain's right hemisphere processing (Neurologism Tree 2007, 35).[8] This, within the biblical context itself, within the life situation analysis of this context and sphere, was where authentic healing took place, or at a minimum, where transformation began.

JE was not just an in-your-head or a cognitive theologian, but a theologian of the heart. Taken as a whole, the insufficient and sufficient (inadequate/adequate) signs of transformation/religious affections were a *biblical*

psychology of transformation. JE's analysis was taken from within the biblical world and its players as a systematic whole. This model was a rare and matchless portrait of transformation. Third, the phenomenology of healing, whether Puritan or postmodern, contains some timeless truths. Some of the miraculous healings in the biblical, Puritan, and present world demonstrated realities that will always be life giving. What does this look like exactly?

The presentation given subsequently excavates and compares JE's data with the markers of transformation from AEDP based on a thorough reading. This comparison is not a rigid, one-to-one correspondence between the two systems; rather, it is a general and yet specific enough rendering to demonstrate a psychology/theology of transformation. Furthermore, JE's data will be presented parsimoniously due to his exhaustive review and present space limitations.

1. JE
   - Affections are supernatural, divine, spiritual—the indwelling of God came to an individual as a permanent, relational, secure, and stable personal reality (Jn 14:16–17; I Cor 3:16; Rom 8:9–11).
     - God imparted and communicated aspects of his nature to another individual in his or her heart. He becomes a True Other at the time of a person's need or desire.
     - This presence of God came out of a complete and thorough framework of grace—an unconditional love and compassion.
     - God, as a person, gives himself to another person. He has them in his mind's eye.
   - Religious feelings are grounded in love of God, not just for oneself and for one's profit (1 Jn 4:19).
   - An individual enjoys God for his beauty, faithfulness, goodness, and moral excellence (Rev 4:8; Isa 6:3). There is not a secondary gain or manipulation on the part of the receiver's response. The receiver enjoys the newfound presence of the other not for what he can get out of it. The individual embraces God, not because God has touched the individual where his self-interests lie, but out of the unconditional love and grace the person has received. This is a heartfelt mirror response.

   AEDP
   - Secure attachment bonds are associated with optimal functioning. This attachment bond of unconditional love between the True Other and its object regulates and coordinates affective states. The True Other generates a relational bond, through which the affective competence of the True Other, over time, is internalized by the person. The attachment bond is able to repair where there is rupture. Furthermore, the True Other is attuned to the person's needs and ups and downs of life so as to help when the person is overwhelmed. There is a dyadic relatedness handling the emotional communication and the regulation of categorical emotions with their narrative history. Moreover, the

"True Other is an external presence who facilitates our being who we believe ourselves to be, who we are meant to be, someone who is instrumental in helping to actualize the sense of True Self" (Fosha 2005, 531).

2. JE

- The heart and mind of the person knows God (1 Jn 2:20; 2 Cor 2:14). A person has a sense of what is holy and good. He has a taste, a disposition, or a relish of that which is good and holy.
- The person is certain and not doubtful of knowing God. There is an authentic sense of rightness and truth sense (Lk 24:31–32; 2 Cor 4:6). An individual's sense of God is indisputable. God is self-authenticating to the person's heart, and the person knows it. The individual is not compelled to prove it to be certain. The reality of God, the True Other, is all-pervasive, authenticating, and yet does not obliterate the receiver's identity. The individual is embraced, intact, and yet enlarged by the experience of the True Other, namely, God.
- Humility means an individual freely embraces God, moves away from his own failures and brokenness, and embraces the True Self (Lk 15:8–10). Transformation is generated and experienced by the receiver through a genuine and free embrace of his or her condition within the environment of a caring other, who has sought the individual out from an unconditional love and grace.

AEDP

- As this dyadic state of attunement is created, a state of consciousness is co-created. This means that the individual integrates essential elements of the True Other; the person knows the True Other's state of mind (implicit and explicit); and the person can experience a power of becoming larger than himself or herself. The person being with the True Other can experience his or her True Self.

3. JE

- Our nature, at its core, is transformed by unconditional and unrelenting love and grace. There is a change, a conversion experience (2 Cor 3:18). An entirely new reality that is indelible has settled within the individual. The reality of the True Other and its effects on the receiver cannot be erased.
- Religious affections generate a heart of love, compassion, forgiveness, and mercy (Gal 5:22–23). The transformation of the receiver is a model and a mirror of the True Other he or she has been experiencing. For JE, this does not mean a loss of identity or the uniqueness of the individual, but instead a wholeness that is exhibited distinctively.
- Religious affections exhibit a tender heart (Jn 11:35).

AEDP

- Nothing is ever the same again. The present state of healing is discontinuous with the past. A whole new reality has now been ushered into the person's life. When a fostering True Other plays a role in the transformation of the person, healing affects include feelings of gratitude, love, tenderness, and appreciation toward the affirming other. In the crisis of change,

there are tumultuous emotions. It is not unusual for a person to experience a deeper psychic integration of opposing qualities, for example, knowing joy from deep pain or experiencing light after long periods of darkness, feeling understood after having felt misunderstood. As one encounters a new or transforming experience, this is a homecoming. A hallmark of core state is that an individual encounters a new home address, and yet he or she has always lived there.

4. JE
   - Religious affections possess a sense of balance and proportion (Jn 1:14, 16).
   - The transforming grace of religious affections desires more of the same. The more an individual grows in the unconditional love of God, the more eager he or she is to press forward to grow (Phil 3:13–16).
   - Transformation or authentic religious affections always translate into action: good works. The unconditional love and grace of God exhibits a connection between profession and practice.

   AEDP
   - The capacity to change or revise oneself is at the heart of adaptation. Core state is a dispositional tendency that is wired in, that is, a part of organismic, somatic, and whole-person dynamics. A disposition drives one to experience the truth with respect to his or her own experience of the self, the other, and emotional reality. We are motivated to heal, to grow, and to know ourselves and others. The truth sense is affectively marked by peace, clarity, compassion, and generosity. Moreover, these healing processes cascade. In the midst of the great complexities of life, we become increasingly clearer to ourselves.

Although both systems presented come from three different worldviews, that is, the biblical environment, JE's interpretive rationalistic-Calvinism of the biblical environment, and AEDP's postmodern environment, the alignment and parallel markers indicating transformation are enlightening. Perhaps the parallels of healing and transformation demonstrate some timeless truths about human transformation that are evident within the human prospect in any era. It is important to note that well-being contains the two elements of integration and complexity. Well-being, or transformation, is defined as a system that connects differentiated elements into a functional whole, that is, integration. This system, as it moves toward integration, achieves maximizing complexity (Siegel 2006).[9] The previously articulated systems of transformation, the biblical context, JE's biblical psychology, and AEDP illustrate that differentiated elements can connect into a functional whole—integration—thereby maximizing complexity. Transformational systems generate a complexity that demonstrates individuals feeling a different sense of connection within themselves and the larger world beyond, and a connection to a larger whole beyond their immediate lives.

CONCLUSION

Fosha's work of AEDP demonstrated a phenomenology of transformation and healing. This wide-angle lens viewing the human condition offered some new and old insights into and markers of the psychodynamics of the human heart's healing processes. In other words, it answered the question: what is so healing about healing? The one critique of AEDP that comes to the foreground stems from the idea that there is no such thing as a True Self (see earlier discussion). It is true, theological dogmatics notwithstanding, that a perfect or idealized True Other does not exist. However, there does need to be a working definition of the core True Self and True Other. Without this baseline, the foundation on which an individual builds his or her connective self experientially, moment-to-moment in a supportive dyadic environment, can become a moving target, without a compass or center. What is imbedded implicitly in AEDP and stated explicitly within the previous biblical examples, including JE, is that a core True Self and True Other can be defined. Not surprisingly, AEDP expresses the phenomenology and language of a compassionate, caring, clear, creative, connective True Other. But the core values of this True Self/True Other are permanent; yet, they are also flexible and adaptive traits that meet the receiver where he or she is.

The permanency of this core self is not based on conditional behaviors, but on an unconditional love relationship and compassion. This permanence and these values are the elements of the definition of the core True Self/True Other. In other words, the True Self/True Other as compassionate, creative, empowered, and respected is a person's nonnegotiable, indestructible home address. A person can become disconnected from his or her compassionate and empowered True Self. However, reconnection is possible. This is what the biblical examples and JE demonstrate and uniquely plead for us to grasp, whereas AEDP can only highlight the experience of and illustrate this core value of the True Self/True Other, without being able to define the permanent inner nature of the core self. Declaring this foundation of the True Self/True Other, which was so aptly demonstrated and embedded in the phenomenology, AEDP would have been a great aid to the discussion.

To be fair, the psychology of AEDP and its metatherapeutics is not a catch-all explanation or a theory from a scientism (Gould 1996b).[10] AEDP sought to capture, utilizing the limits of language from various disciplines, the complexity of how people get better. In addition, the ideas, beliefs, and values—what is called truth—of AEDP passes a nuts-and-bolts working test, that is, a call to action, a call to heal. The earthiness of these ideas poses a challenge to move away from the reification of ideas and the stuff

of secular idolatry and toward how to get through an ordinary day. Most important, AEDP does not hint at turning religion into the swamp of a reductionist or condescending psychology (James 1997).[11] We are called on to understand the phenomenology of transformation in all of its complexities and simplicity, no matter what scholarly domains are brought together to explain it. Why? So the objective domains of science and the subjective domains of knowing can live in one home to bring about greater insight and transformation.

NOTES

1. Mahoney (1991) makes a thorough review of human change processes.

2. Siegel presents another macro model of healing through the neurobiology of interpersonal relationships and how they aid psychotherapy. Fosha's model, although different, illustrates this same consilient approach. For Siegel, mental well-being means a trajectory of FACES—flexible, adaptive, coherent, energized and stable—generating the vital feeling of harmony and coherence. Coherence in this model can be seen as containing the following features: compassion, openness, healing/harmony, empathy, receptivity/resonance, engagement, noesis (understanding, pereiving), clarity/coalescence, and emerging enlightenment. The mind is a complex, nonlinear system that achieves states of self-organization by balancing two opposing processes of differentiation and linkage. When different areas of the brain are allowed to specialize in their functions, integration happens when they become linked together. Integration is a functioning of the whole, as illustrated through the acronym FACES. Integration follows nine major domains: consciousness, vertical, bilateral, memory, narrative, self-state, temporal, interpersonal/mirror neuron system, and transpirational. When a system moves toward integration, it is achieving a movement toward maximizing complexity. Compromised mental health means rigidity and chaos.

3. But most important, as we attempt to move toward living under one roof between the objective and subjective sciences, the twenty-first century must stay away from a biological and/or a neurobiological determinism. This boundary will become more important as we launch further into the families of the biological sciences in the new millennium. Gould (1996a, 1996b) is correct in this warning. This warning is also applicable to theological discussions as they center on the values of neurotheology.

4. These categories of right and left brain functioning may be generally true; however, these categories must not be maintained rigidly. See entire chapter for further discussion.

5. Mahoney (2003) gives a clear demonstration of this consilient approach and its application.

6. The entire summary presented is a conglomeration of these five works.

7. All biblical references are from the New International Version (NIV), 1986, Nashville: Holman Publishers.

8. Notice the playful portrayal and portent through the neurologism tree. *Neurotheology* is part of a growing classification and vocabulary. See Neurologism Tree bibliographic entry for further investigation of the trends you need to know now.

9. See Siegel (2006) for his carefully thought out application of this definition.

10. See Gould (1996b, chap. 7) for a thorough discussion.

11. See the introduction by Robert Coles for William James' (1997), *The Varieties of Religious Experience.*

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CHAPTER 9

Miracles and Crowd Psychology in African Culture

Olufemi A. Lawal

The human race has witnessed miracles for as long as it has existed. Reports of miraculous occurrences have been as varied as the experiences that brought them about and have come from all racial, ethnic, sociocultural, and religious groups the world over. This diversity of reports of miracles also mirrors the extent to which different people and different groups of peoples believe and interpret events and occurrences as miraculous. While some experiences may pass as daily routine for many, some others judge them as indeed miraculous. In essence, people's judgment as to whether an event is miraculous depends on a number of factors, which do not exclude their racial, ethnic, sociocultural, and religious backgrounds. Hence miraculous events, as perceived and experienced by different peoples, may range very widely, for example, from sleeping and waking to rising up after being dead for several days.

Although miracles may vary as widely as their judgments, the history of this phenomenon situates some events as indeed being world acclaimed, with the majority of peoples across continents judging them as miraculous. The miracle of the holy fire, which occurs every year on the Saturday before Easter Sunday, Holy Saturday, at the Church of the Holy Sepulcher in Jerusalem, drawing huge crowds of Christians from many parts of the world, is a good example. According to Hvidt (2007), a blue, indefinable light emanates from the core of the stone on which Christ is believed to have been laid after his death, as soon as a patriarch of the Orthodox Church kneels in front of this stone and says certain prayers on this very special day. The miracle is said to proceed with the mysterious kindling of the closed oil lamps as well

as the two candles of the patriarch, climaxing in the spontaneous kindling of the lamps and candles of some of the people inside the church and within its vicinity.

Another extant, seemingly world-renowned site that, over the years, has generated reports of miracles, or is believed to bestow miracles on people from some different parts of the world, is the tomb of La Milagrosa, the "Miraculous One," a Cuban woman named Amelia Goyri de Adot, who died during childbirth, along with her infant, on May 3, 1901. According to John Rivera (1998), the frequent trooping of crowds from different parts of Cuba and the world over to the site is due to the fact that Amelia's body and her baby's were found neither contaminated nor decomposed, coupled with the fact that the baby, who was laid at her feet at burial, was found wrapped in her arms, when her body was exhumed a few years after. As this mysterious story spread, her hitherto grief-stricken husband, who alone visited the grave many times every day, was joined by other visitors, whose numbers continue to increase. This arises from the testimonies of miraculous answers to prayers and solutions to problems rendered for the people who said those prayers or presented those problems during their visits to the site.

Although it is clearly mysterious that a human corpse was found neither decomposed nor contaminated years after burial, it is possible, or even likely, that the miracles reported by the pilgrims to the grave of Amelia result from other causes than people believe. For example, that crowds of people congregate there to offer prayers that are answered by God does not suggest that God would not answer the same prayers for the same crowds if said elsewhere. Besides, one's awareness of the occurrence or discovery of similar mysteries in 1988 and 1997 in the city of Ibadan and the town of Iwo, in Nigeria, makes it evident that this kind of mystery is somewhat commonplace, these few discoveries, so far, having been made by accident.[1] However, neither of the sites of the two cases cited from Nigeria has generated as much effect on the peoples of Nigeria as has Amelia's grave in Cuba, though this may well be due to the fact that the Nigerian sites did not receive wide publicity.

While it could be understood that miraculous events in general, and sites of famous miracles in particular, have strong potential for drawing crowds in intensely populated settings, miracles also take place and are widely reported in nondensely populated regions, without attracting much attention. Why more miracles are usually observed and reported to take place amid dense populations, compared to noncrowded atmospheres, remains a puzzle, and this puzzle seems to cut across religions and cultures. The Bible is replete with records of individuals who experienced miracles alone, amid a few people, or in a tumultuous crowd, or as part of a gathering or a crowd that collectively experienced the miracle.

Other religious books also contain accounts of miraculous occurrences. In the mythologies of the African traditional religion, the gods and goddesses

who held sway in the region before the arrival of Christianity, Islam, and other religions were said to emerge from their shrines only when sacrifices were made to them during their festivals. These were held at specific times of the year, and during such festivities, some people among their crowds of worshippers usually reported having miraculously received solutions to their problems. Mythology has it that the goddess of the Osun River, in Osun State, southwestern Nigeria, stopped making her emergence from the Osun River during the annual Osun-Oshogbo festival many years ago. This happened after she was forced to make an emergency return dive into the Osun River because a foreign tourist, witnessing her manifestation, attempted to capture her. Nevertheless, her mammoth crowd of worshippers, both in Nigeria and abroad, who besiege the shrine annually during the festival still report miraculous experiences.[2]

Also peculiar to southwestern Nigeria is the myth of the emission of fire through the mouth by Alaafin Sango, who was reputed to have set things and places on fire merely by releasing real flames through his mouth. That Sango actually existed is largely reflected in legends or oral and written tradition as well as in films done on the old Oyo Empire. In two such films, namely, *Oba Koso* and *Ose Sango,* Sango was depicted as a descendant of Oduduwa, the progenitor of the Yoruba ethnic group. He ascended to the coveted throne of the Alaafin of Oyo town. Alaafin Sango was said to have helped the Oyo Empire to conquer her neighbors and rival kingdoms with his invincible strength, especially his ability to emit real flames from his mouth. With these he was able to destroy the armies, camps, dwellings, and farms of the enemies, a feat that his subjects and enemies found miraculous. This is the reason why some people worship the Legendary Sango still today.[3]

What, therefore, is a miracle and a crowd, and in what ways, if any, can being in a crowd facilitate the occurrence of a miracle? To answer these important questions, this chapter explores the definitions and meanings of miracles and crowds and analyzes the psychological processes that underlie the behavior of individuals in a crowd and the crowd dynamics that can induce miracles, rendering the experience infectious.

WHAT IS A MIRACLE?

The word *miracle* was coined from a Latin word meaning "to wonder at." Miracles are events, that seem to transcend human powers and the laws of nature, resulting from a special divine intervention or to supernatural forces. The *Encarta* dictionary offers three related definitions of a miracle. First and accordingly, a miracle is an event that appears to be contrary to the laws of nature and is regarded as an act of God. Second, a miracle is an event or action that is amazing, extraordinary, or unexpected. Third, a miracle is something admired as a marvelous creation or example of a particular type

of science or skill. David Hume defined a miracle in a more generic light, seeing it as (1963, 127) "a transgression of a law of nature by a particular volition of the Deity, or by the interposition of some invisible agent." Here Hume uses the word *deity* to refer to God or any other non-God or ungodly supernatural forces or their agents. If we use Hume's definition, all magic and sorceries would qualify as miracles. Thus, to the extent that those who believe in the other-than-God sources of supernatural feats define them as miraculous, these feats are indeed miracles in the reckoning of those people. The implication of this is that any "event apparently transcending human powers and the laws of nature, that is attributed to a special divine intervention or to supernatural forces" (Hume 1963, 127), across cultural and religious beliefs, is a miracle.

I define a miracle as a desirable, admired, and amazing event, whose occurrence apparently violates the laws of nature and is thus attributable only to God or to an apparently transcendental force other than God. This definition suggests that no miracle can occur or be experienced without God or an other-than-God force mediating between the laws of nature and the occurrence of that miracle. Miracles occur or are performed in all religions, religious denominations, cultures, and societies. The differences between them lies only in whether they are caused by God or a force other than God. This discrimination has implications for the types, quality, and lifespan of the miracles, as reported by those experiencing them.

Saliba stresses that (2005) "stories of miracles are a common feature of practically all religions." He points out that many religious leaders and founders, including Zoroaster, Confucius, Laozi (Lao-tzu), and Buddha, have been credited with miraculous powers and actions. Likewise, Moses and the prophets of Israel were said to have performed miraculous acts at God's bidding. Saliba stresses that (2005) "the Muslim tradition includes accounts of the miracles of Muhammad, such as his extraordinary healings, but did not fail to acknowledge, however, that more attention has been given to miracles in Christianity than in any other religion." For this reason, this discussion will more prominently feature miracles believed to originate from God, especially as recorded in the Bible and as experienced in contemporary Christianity. How, then, do the Bible and Christian literature define a miracle?

The *American Tract Society Dictionary* defines *miracle* as "a work so superseding in its higher forms the established laws of nature as to evince the special interposition of God" (Miracle, 2006a). The *Easton's 1897 Bible Dictionary* defines *miracle* as "an event in the external world brought about by the immediate agency or the simple volition of God, operating without the use of means capable of being discerned by the senses, and designed to authenticate the divine commission of a religious teacher and the truth of his message"; as "an occurrence at once above nature and above man"; and as an occurrence that "shows the intervention of a power that is not limited by the laws either

of matter or of mind, a power interrupting the fixed laws which govern their movements, a supernatural power" (Miracle 2006b)

WHAT IS A CROWD?

Rod Plotnik (1993) refers to a crowd as a large group of persons, most of whom are strangers to each other and unacquainted. While this definition appears to depict what a crowd is, it leaves out a seemingly important characteristic of large groups of people who constitute crowds. This characteristic appears to have been identified by Donelson Forsyth (2005), who defines a crowd as an aggregate of individuals sharing a common focus and concentrated in a single location. The major difference between the two definitions is that the latter, unlike the former, depicts members of a crowd as people who share a common focus. An important and almost synonymous terminology, used by both, is *collective* or *aggregate* and *group*. By virtue of sharing a common focus, a crowd is a group, and a collective or aggregate is a large number of persons in social interaction.

Against this background and for the purpose of this discussion, a crowd is a large collection of people, most of whom share a common purpose, focus, belief, sentiment, or goal, for which reason they all are concentrated in the same single location. The commonalities of purpose shared by a typical crowd, which are the basis for the dynamism in their behavior, may well explain why miracles tend to generate in crowds and, in turn, generate crowds. Crowd behavior, coupled with those of the individuals who make them up, appear to have potential for facilitating the occurrences of miracles among individuals in the crowd.

Consciousness-Unconsciousness in Individuals and Crowds

The idea or category of consciousness-unconsciousness is popular in medicine, philosophy, and psychology. Rooted in psychoanalytic psychology, consciousness and unconsciousness are quite broad in scope. While *consciousness* in psychology shares the same meaning as physical or neurological consciousness, the same cannot be said of *unconsciousness;* rather, *unconsciousness* in psychology is viewed in a narrower sense, specifically as something that has to do exclusively with the mind. Arlow and Herma (2005), in a treatise on psychoanalysis, stressed that the concept of the unconscious was first developed in the period from 1895 to 1900 by Sigmund Freud. He situated it as the hypothetical region of the mind containing wishes, memories, fears, feelings, and ideas that are prevented from expression in conscious awareness. They manifest themselves, instead, by their influence on conscious processes and, most strikingly, by such anomalous phenomena as dreams and neurotic symptoms.

If Freud's theory can be trusted, the wishes, memories, fears, feelings, and ideas that are held by the unconscious part of the human mind are not available to the holder's conscious awareness. They are known to exist only because their impacts are seen or felt through the conscious processes that take place in daily human activities. Since it is simply traditional, in psychoanalysis, to attribute all conscious human processes to the controlling influence of the unconscious, the structure of the human mind portrays the mind as shaped like an iceberg, with the unconscious part being larger than the conscious part, and the conscious part being typically described as just a tip of the iceberg.

A figure of an iceberg in the ocean depicts the structure of the human mind as proposed by Freudian psychoanalysis. The id, ego, and superego are shown as the components of the human personality. Among Freud's three basic personality components, only the id is totally unconscious, that is, below the waterline. Most of the superego and some of the ego are also below the waterline. The water represents the unconscious mind, and the air and land above the waterline represent the conscious mind. Therefore the term *unconscious* is particularly relevant to psychoanalysis and refers to thoughts and feelings that have purposefully been forgotten as well as to experiences or impulses to which we neither pay nor wish to pay attention but which influence us nevertheless.

Carl Jung (1925), a psychoanalyst and student of Freud, disagreed with Freud's analysis of the unconscious as the source of all human psychic energies. Jung, instead, expanded the realm of the unconscious to two parts, the personal and the collective unconscious. In his extensive analysis, Jung (1925) defined consciousness as the ability to focus attention and, more specifically, as that which we are aware of at any given moment. This implies that consciousness is our awareness of things and events in our environments. The personal unconscious contains an individual's complexes, attitudes, and entire world of experiences, including forgotten and repressed memories, as Freud's claimed. A good example of this, according to Howard Kendler (1987), is that of a girl with repressed hostilities toward her father developing a father complex that interferes with establishing a satisfactory relationship with her husband.

The collective unconscious, on the other hand, contains the archetypes or primitive patterns of ancestral images associated with significant cultural phenomena, such as birth, death, power, and deity, predisposing persons to feel, think, and act in the same manner as countless generations of ancestors before them. Essentially, the collective unconscious or archetypes are the reservoir of the experience of the human race as accumulated through history and passed from generation to generation. This amounts to the constantly repeated experiences of humanity that are common to the entire human race, whatever our race or culture (Jung 1925).

The personal and the collective unconscious are said to be related in that the ideas that constitute the personal unconscious develop out of the archetypes of the collective unconscious. By virtue of this relationship and the seemingly overreaching influence of the collective unconscious, all individuals in the same society would be expected to react to certain phenomena in similar ways. However, individual human beings may still retain their personal unconscious complexes, thoughts, and feelings about every phenomenon or experience. This may sometimes make them act in very peculiar or uniquely different ways, the collective unconscious notwithstanding. Thus their relationship lies in the fact that the personal unconscious is a subset of the collective unconscious, so that the former is an individual peculiarity, and the latter, a societal commonality (Jung, 1925).

In furtherance of his theory of the unconscious, Jung (1925) depicted awareness as a product of consciousness by stressing that the more aware we are, the more conscious we are. To the extent that this type of awareness is a personal one, it is referred to as *self-awareness*. What, then, is self-awareness? Self-awareness, according to Forsyth (2005), is the psychological state in which one's attention is focused on the self, personal standards, or inner experiences: "Reductions in self-awareness may lead to cognitive and emotional changes, including disturbances in concentration and judgment, the feeling that time is moving slowly or rapidly, extreme emotions, a sense of unreality, and perceptual distortions, all of which constitute an altered experiential state that may even be intensely pleasant" (Forsyth, 2005, 46). Thus self-awareness can be regarded as an individual's consciousness of, and ability to regulate his or her, cognitions and emotions.

Typically, an individual in a crowd is believed to experience reduced self-awareness. This means that most individuals share this reduced self-awareness when in a collective setting. Why do persons in crowds experience reduced self-awareness? How similar or variable are these levels of individual self-awareness for people in the same crowd? Drawing on Le Bon's (1896) conceptualization of the crowd, Jung (1925) reasoned first that the crowd is essentially a psychological phenomenon amid which people behave differently compared to when isolated, and second, that the unconscious has something to do with crowd thinking and acting.

Diener (1980) employs the theory of objective self-awareness, proposed by Duval and Wicklund (1972), shedding light on the foci of attention of individuals in a crowd compared to their counterparts who are alone. The thrust of the theory is that among other things, perceptual immersion in a group impacts self-awareness in that it overloads the information-processing capacities of the individual, hence blocking the possibility of self-directed attention. The consequence of this is a state of lowered objective self-awareness, with individuals being unable to retrieve internal standards, thus becoming increasingly influenced by environmental stimuli. This theory is said to identify cohesion and enhanced arousal as factors present in some crowd situations,

which lead to people directing their attention outward and correspondingly less on themselves or on private standards. The result is that individual behavior becomes less self-regulated and more controlled by immediate cues and norms in the environment.

As stressed by Forsyth (2005), studies of self-awareness suggest that individuals can focus their attention outward, onto other members of the crowd or objects in the environment, or inward, on the self. When this focus is on the self, people become more self-aware and are more likely to attend to their emotional and cognitive states, carefully consider their behavioral options, and monitor their actions closely. Conversely, when the focus is on features of the situation that are external to the person, whereby people fail to monitor their actions, they will be more inclined to follow the focus, emotion, and attention of the crowd.

One major implication of reduction in individual self-awareness amid a crowd is *deindividuation*. Festinger, Pepitone, and Newcomb (1952) define *deindividuation* as the increased tendency for individuals to become so submerged in their group that they feel as though they no longer stand out as individuals. More specifically, Forsyth characterizes deindividuation as "an experiential state, caused by input factors such as group membership or crowd membership, that is characterized by the loss of self-awareness, altered experiencing, and atypical behaviour" (2005, 56).

While the latter definition suggests that deindividuation is a state representing a complete loss of self-awareness, both definitions suggest the existence of another state that is diametrically opposed to deindividuation. This opposite state is known as *individuation*. In furtherance of his explanations, Forsyth (2005) depicts individuals who have become deindividuated as those who feel lost in the group or crowd and will try to establish their individual identities. Forsyth stresses further that people in large crowds may act very differently, sometimes oddly, to regain their sense of individuality. It is thus clear that while individuals immersed in a crowd are subjected to deindividuation, they may try to get out of this state themselves by actively seeking individuation.

In his biography on Jung, Boeree (2006) focuses extensively on the collective unconscious and its adherents. Citing Jung, Boeree situates individuation as the process of changing an individual's relationship to the unconscious. Boeree submits that "once an individuation process is successfully initiated, the individual's identification with the collective herd will slowly be terminated" and "such individuals will discover traits in themselves which will make them stand out from the crowd" (Boeree 2006).

In a crowd, an individual's unconscious wishes, memories, fears, feelings, and ideas have high potential for momentarily and speedily migrating to the conscious. Furthermore, this implies that certain types and levels of consciousness or unconsciousness are crucially precursory to an eventual migration of wishes, memories, fears, feelings, and ideas from the realm of the

unconscious to the conscious, while still being in the crowd. What are these types and levels of consciousness or unconsciousness, and how do they influence the experience of miracles among individuals in crowds?

Miracle as a Product of Entrancement, Conscious-Unconscious State, Individuation, Synchronicity, Transcendence, and Contagion

Day-to-day testimonies and personal observations at Christian crusades seem to suggest not only that people's states of consciousness are largely altered while in a crowd, but that more miracles occur and are reported at such gatherings. The dynamism of the psychological processes that take place is not a monopoly for Christianity; however, with the manner in which they take place among crowds, they seem to contrive a highly conducive atmosphere for a more effective movement of the Holy Spirit of God among individuals in a crowd. Hence more and greater miracles occur in crowds than in noncrowded gatherings. The psychological states of the conscious, the unconscious, entrancement, individuation, synchronicity, transcendence, and contagion, among others, are identifiable keys to the quicker and surer move of the Holy Spirit among individuals in a crowd. How do these combine to influence the move of the Divine Spirit and hence immediate or later occurrence of miracles?

Entrancement is a concept that explains the attraction, binding force, or synergy among people who make up a crowd. Jung (1925) defined it as an alignment of matching energies and expectations at one of the deepest levels of human experience. These constitute attraction, resonance, and union between thematically similar and congruent persons, similar in thinking and believing, at many levels of their life experiences such as images, feelings, characters, fantasies, and chemistry. He suggests that this increases the likelihood of a trance-like state and eclipses analytical thought. We lose our minds and surrender ourselves to some fantasy or ideal way of living. That involves selective attention, which filters out incompatible information.

Edwards and Jacobs (2003) cite Jung, speaking of synchronicity as a principle whereby apparently separate external events might be connected through an underlying meaningful association in the timeless world of archetypes. Jung spoke further of synchronicity as being an experience occurring in a moment when inner and outer force intersect on an *acausal principle*, that is, an intersection in which one force does not cause the other. Jung believed that many experiences perceived as coincidences were not merely due to chance, but instead reflected the creation of an event or circumstance by the coinciding or alignment of such forces. The process of becoming intuitively aware and acting in harmony with these forces is what Jung labeled individuation. He stressed that individuated persons would actually shape

events around them through the communication of their consciousness with the collective unconscious.

Thus, according to Jung, individuation is brought about in large part by the synchronistic intersection of the personal conscious and the collective unconscious. This means that individuals in a crowd experience individuate when the subjects of their collective unconscious, or archetypes, suddenly coincide with what they are experiencing in reality, while still being in the crowd.

The process through which the unconscious meaning of archetypes is revealed to the conscious mind, ensuring a bridge between consciousness and unconsciousness, is referred to as *transcendence.* The transcendent function, according to Jung (1925), is understood to be mainly that of compensating for the tension between the spiritual and material worlds by facilitating a transition from one unbalanced psychological state to another that is balanced. Jung thought that transcendence was produced by the tension of polarity in our experience or psyche. In his research on transcendence, titled "Signs of Transcendence," Leskovar (2005) drew on Jung's views to describe the experiences of people undergoing transcendence. Leskovar thought that people who experience transcendence tend to feel calm, surrounded by love, gratified with a sense of fulfillment, and touched by healing, sometimes of fatal diseases. In the light of the previous discussion, individuation can be seen as a construct that entails two processes: synchronicity and transcendence. Synchronicity here can be understood as the process through which the actions, cognitions, and feelings of an individual in a crowd, who is presumed to be under the influence of the collective unconscious, coincide with that individual's real or conscious experience. A good example can be that of a blind individual who sings, dances, and prays with a crowd of Christian worshippers at a healing crusade and earnestly hopes to be healed of his or her blindness. In that supposedly unconscious state, the extent to which the individual believes or fantasizes that God, to whom the prayers, dancing, and singing are being offered, can and will perform the miracle determines that individual's chances of being cured of the blindness.

In synchronistic terms, the chances that such an individual will be cured of the blindness depends on the extent to which he or she holds and expresses beliefs about being healed. Christians call this *faith.* Moreover, it depends on the extent to which such an expression coincides with or happens by chance alongside signs of or the actual onset of the miracle, which in this case is receiving of sight.

Transcendence can be regarded as a stage through which individuation is completed. It may be understood as the point at which an individual suddenly realizes that his or her physical and realistic experience of a miracle has completely replaced the beliefs or fantasies that took place in his or her unconscious. Essentially, transcendence is the state at which it dawns on the

individual that some or all of his or her hitherto expressions of wishes, longings, and yearnings in the unconscious have been transformed into conscious realities. A major point of distinction between synchronicity and transcendence is that unlike in synchronicity, an individual is said to experience transcendence only when he or she has attained full consciousness. This requires having been emancipated from the state of collective unconscious to that of conscious, or, as the previous example suggests, a state of believing in receiving a miracle of sight to that of actually receiving sight.

As Jung felt that as we become more individualized in our development, we deal with our shadow side more directly than when we are children, and then we tend to have a more direct reaction to it in the form of conscious or unconscious resolve to overcome it. Physical ailments can disappear and long standing problems can be resolved. Thus individuation can be identified as an avenue through which individuals in a crowd experience miracles.

THE PSYCHOLOGY OF SOME MIRACULOUS EVENTS IN AND OUTSIDE OF THE BIBLE

From the Old Testament (OT) to the New Testament (NT), the Bible is replete with accounts of miraculous events. The focus of this section is on some of the miracles that, reportedly, occurred to individuals or a few people amid huge crowds or that were experienced by the crowd as a whole.

The Bible, in Exodus 14:21 (King James Version, KJV), tells of how God provided the miracle that the children of Israel needed very urgently to escape from the Egyptians, who were chasing them. This need cut across the entire population of Israelites, which saw them thinking, imagining, reasoning, feeling, and acting in very similar ways. This similarity of cognitions, affects, and behaviors, which manifested more when the people congregated to share the same plight, as they did, were products of their *collective unconscious*. In the light of the analysis in the foregoing sections, it is instructive to imagine that most of these people were experiencing lowered self-awareness and deindividuation, the result of which the KJV of the Bible summarizes as follows: "And Moses stretched out his hand over the sea; and the LORD caused the sea to go back by a strong east wind all that night, and made the sea dry land, and the waters were divided." While one can only imagine how deep Moses' experience of these psychological states could have been, compared to those of his followers, everybody in that crowd can be said to have experienced individuation through synchronicity and transcendence, both of which ushered them into the ecstatic experience of the miracle.

The felling of the walls of Jericho is another miracle that can be said not only to have occurred to a crowd as a whole, but also to have been facilitated,

made faster, and made more certain by the collective attributes of all the individuals making up this crowd. Perhaps the Israelites who were involved in this big miracle were not as populous as those who experienced the parting of the Red Sea; the fact that these people wanted the same thing to happen and demonstrated their belief in God's ability to make it happen is enough to suggest that all these constituted their collective unconscious, under the manifestation of which they were all subject to the lowering of their individual self-awareness to the point that they became deindividuated. The Bible states, in Joshua 6:20 (New Revised Standard Version [NRSV]), that "the people shouted when the priests blew the trumpets. And it happened when the people heard the sound of the trumpet, and the people shouted with a great shout, that the wall fell down flat. Then the people went up into the city, every man straight before him, and they took the city."

As it is not unexpected for incredulity to follow miraculous occurrences, skeptics and scientists who would make desperate attempts to explain the felling of the wall of Jericho as an event resulting from natural or physical causes, that is, the blowing of the trumpet and shouting, are right on one hand but wrong on the other. They are right, albeit unknowingly, in the sense that the crowd's entire actions were borne out of their collective unconscious, owing largely to the fact that the individuals making it up found themselves expressing the same wish and pursuing this wish in the same manner. But they are wrong in that they try to attribute the felling of the wall to the physical impact of the Israelites' shouting and trumpet blowing.

The shouting and trumpet blowing, which was a practical demonstration by the people of their belief in God's ability to fell the wall, served the purpose of galvanizing the crowd into a state of lowered self-awareness and, later, deindividuation, which were crucial to a state of individuation during which such a miracle could have happened. Therefore, because the entire crowd of the nation of Israel needed the miracle at that time and demonstrably believed they would get it, it was delivered to them collectively, the joy of which they shared both individually and collectively.

The story is also told in Luke 7:11–15 of a young man, the only child of a widow, whom Jesus raised from the dead amid a huge crowd of people who followed Jesus up to that location. This includes the role of several mourners and those who were carrying the man's body out to the site of burial outside the city called Nain. The World English Bible relates the story as follows:

> It happened soon afterwards, that he went to a city called Nain. Many of his disciples, along with a great multitude, went with him. Now when he drew near to the gate of the city, behold, one who was dead was carried out, the only son of his mother, and she was a widow. Many people of the city were with her. When the Lord saw her, he had compassion on her, and said to her, "Don't cry." He came near and touched the coffin, and the bearers

> stood still. He said, "Young man, I tell you, arise!" He who was dead sat up, and began to speak. And he gave him to his mother.

Similar to this is the story of how a man called Lazarus arose, at the command of Jesus, in the presence of a crowd of friends, relations, and mourners, after being dead for four days. The American Standard Version of the Bible in John 11:41–45 relates the story as follows:

> So they took away the stone. And Jesus lifted up his eyes, and said, "Father, I thank thee that thou heardest me. And I knew that thou hearest me always: but because of the multitude that standeth around I said it, that they may believe that thou didst send me." And when he had thus spoken, he cried with a loud voice, "Lazarus, come forth." He that was dead came forth, bound hand and foot with grave-clothes; and his face was bound about with a napkin. Jesus saith unto them, "Loose him, and let him go." Many therefore of the Jews, who came to Mary and beheld that which he did, believed on him.

The two miracles share the same progression in at least three specific ways. First, they both present cases of people who were already dead and thus could not have wished for any miracle again. Given their circumstances, only Jesus, who performed the miracles, and the crowd present could have had the faith and sought the miracles on behalf of the dead persons. The implication of this is that although the dead were the immediate beneficiaries of the miracles, they were not part of the crowd from whose collective unconscious and altered experiential states they had benefited.

Second, in both instances, to execute the miracle, Jesus directly addressed the dead persons, telling them to arise. One may wonder here what business the crowd had with the miracle if Jesus addressed the dead directly for the miracle to take place. This will simply mean that the crowd's collective unconscious notwithstanding, the miracle would still have taken place. On one hand, the purpose that the relevant altered experiential states of lowered self-awareness, deindividuation, and individuation play in the occurrence of a miracle, especially a mass or crowd-type of miracle, is to prepare the recipient's consciousness and state of mind to receive it, given the obvious fact that in most faiths, especially Christianity, a very strong belief on the part of the would-be recipient that he or she will receive or partake of a miracle is crucial to a miracle taking place. It is therefore instructive to assert and emphasize what has been implied so far: that the phenomenon of faith is related to the issues of self-awareness, deindividuation, and individuation. It is no surprise, then, to read, regarding his many miracles, that Jesus made specific reference to the faith of the recipients.

On the other hand, because the dead unconscious cannot possibly share in the collective unconscious of people around them who may be interceding on

their behalf, communicating with these physically unconscious may require a high degree of immersion into the collective unconscious. While this depth is certainly either unfathomable or definitely not necessary at all in Jesus, it appears to be a *prima facie* precursor for this kind of miracle among humans who believe in Jesus and seek miracles from God in Jesus' name. This implies that the physically unconscious and the dead, who are not privileged to share in the collective unconscious of a group interceding on their behalf, may need to be directly addressed for the intercession by fellow Christians to be effectual.

Alternatively, as implied previously, a high degree of immersion of the intercessors into the collective unconscious may be required for such a miracle to take place. This degree of immersion appears to be what was demonstrated in a story told by the general overseer of the Redeemed Christian Church of God, Pastor Eunuch Adeboye, during a sermon at one of the monthly Holy Ghost services that I attended at the Redemption Camp, Lagos-Ibadan Expressway, in Nigeria. According to him, a bridegroom suddenly slumped and died during the signing of the marriage register in the vestry of the church where he was being wedded to his bride. This, of course, threw the officiating ministers, relations, and friends who witnessed the occurrence into utter confusion. The bride and immediate family members were stunned.[4] In the midst of this confusion, however, the officiating ministers tried to manage the situation such that news of the incident was kept carefully away from the rest of the congregation, who continued to sing praises in enthusiastic expectation of the newest couple.

After praying in the vestry with the dead turning colder and colder, the ministers switched to praises. After a good 35 minutes of intense praise and worship to Almighty God, the dead man pleasantly shocked everybody present in the vestry with a loud sneeze! Behold, he came back from the dead! A pertinent question here is whether the people in the congregation, who were not aware of the incident until it became a testimony, also shared in the collective unconscious that facilitated the miracle. My ready answer is yes. Just as several people in the crowds in the two Bible stories referred to previously might not have looked forward to any miracle, as their mission or expectations were simply to join the bereaved in mourning their dead, that they were present in that crowd was more than enough to predispose them to sharing the same outcome with other members of the crowds, albeit unconsciously.

The convergence theories help explain some psychological underpinnings of the collective behaviors. The central thrust of these theories, as pointed out by Forsyth (2005), is the assumption that individuals with similar or compatible needs, desires, values, motivations, emotions, or goals tend to converge to form a single group; that is, individuals join collectives because they possess particular personal characteristics that, though they may be merely latent or virtually unrecognizable, are the true causes of the formation of both

large and small collectives and contribute to their consequences. According to Forsyth, by joining such a collective, the individual makes possible the satisfaction of these needs, and the crowd situation serves as a trigger for the spontaneous release of previously controlled behaviors.

Those particular personal characteristics, as stressed previously, are what constitute the crowd's collective unconscious. That thrust, in fact, captures the idea of collective unconscious quite accurately as it suggests that the characteristics may be latent or virtually unrecognizable. The idea is that all persons who turn up to form a collective share certain things in common that pertain more to these characteristics than anything else but of which they themselves may be unaware. This defines no other phenomenon than the collective unconscious. To corroborate this is Eric Hoffer's assertion that (2002, xi) "all movements, however different in doctrine and aspiration, draw their early adherents from the same types of humanity; they all appeal to the same types of mind." With this assertion, what appears to be crucial to the amazingly faster and more effective move of the Holy Spirit of God in Christian crowds is the commonality of cognitions, affect, and actions shared by most, if not all, the members.

Next is Jesus' miraculous feeding of 5,000 men, in addition to women and children, doing it with just five loaves of bread and two fish. This miracle is reported in Mark 6:35–42 (Revised Standard Version, RSV):

> And when it grew late, his disciples came to him and said, "This is a lonely place, and the hour is now late; send them away, to go into the country and villages round about and buy themselves something to eat." But he answered them, "You give them something to eat." And they said to him, "Shall we go and buy two hundred denarii worth of bread, and give it to them to eat?" And he said to them, "How many loaves have you? Go and see." And when they had found out, they said, "Five, and two fish." Then he commanded them all to sit down by companies upon the green grass. So they sat down in groups, by hundreds and by fifties. And taking the five loaves and the two fish he looked up to heaven, and blessed, and broke the loaves, and gave them to the disciples to set before the people; and he divided the two fish among them all. And they all ate and were satisfied. And they took up twelve baskets full of broken pieces and of the fish.

A pertinent question here is whether the crowd imagined that another groundbreaking miracle was on the way for them. The answer is yes. Matthew 14:14 (Montgomery's New Testament) tells of what happened before the miraculous feeding of the crowd: "So when he landed he saw a great multitude, and felt compassion for them, and healed their sick." Therefore, as people who had been under Jesus' tutelage at least for that day, and whose illnesses he had healed, most of them already knew that Jesus was capable of any miracle. Besides, having gathered together all day to listen to Jesus teach

and having had him heal their various infirmities, the people can be said to have shared enough in common as to muster the requisite synergy and faith needed to facilitate this kind of collective miracle. Nevertheless, as stated earlier, irrespective of the consciousness of the crowd, Jesus could still perform miracles as he is the custodian of these miracles.

Apart from these explanations, and as strongly implied in the story of the feeding of the crowd, it was already late to go out and get food, and the people, having been there for long hours, were hungry. So they, in addition to their similar spiritual and psychological needs, also shared the physiological need for food, which if not satisfied, according to Abraham Maslow (1970), will not allow any other kind of need to become immediate in human beings.

The itinerant healer that Jesus was can best be appreciated with close reference to the fourfold Gospels. But a couple of instances of this shall be examined here. Apart from the account of Matthew 14:14, the same Gospel in 15:29–31 (Weymouth's New Testament [WNT]) also relates Jesus' healing of many sick people amid a crowd:

> Again, moving thence, Jesus went along by the Lake of Galilee; and ascending the hill, He sat down there. Soon great crowds came to Him, bringing with them those who were crippled in feet or hands, blind or dumb, and many besides, and they hastened to lay them at His feet. And He cured them, so that the people were amazed to see the dumb speaking, the maimed with their hands perfect, the lame walking, and the blind seeing; and they gave the glory to the God of Israel.

Again, the conscious among the sick who were brought to Jesus, their conscious bearers, and the spectators were all part of the crowd in this particular context. By virtue of this, their needs, thoughts, emotions, actions, motives, and belief or unbelief constituted the collective unconscious in this particular context. These were the factors that paved the way for the onset of other pertinent psychological states to which they were subjected, preparing their psyches for the miracle. The fact that people openly expressed their amazement at these wondrous healings by praising God makes it evident that though Jesus was in charge, the people attained individuation through synchronicity and transcendence, thus creating the conditions for the miracle.

Acts 5:14–16 (RSV) relates quite a dramatic miracle occurring after Jesus' death, resurrection, and ascension to heaven. The story goes as follows:

> And more than ever believers were added to the Lord, multitudes both of men and women, so that they even carried out the sick into the streets, and laid them on beds and pallets, that as Peter came by at least his shadow might fall on some of them. The people also gathered from the towns around Jerusalem, bringing the sick and those afflicted with unclean spirits, and they were all healed.

In this story, several people suffering from either physical or spiritual infirmities were laid along the street that Peter, an ardent disciple of Jesus, was to pass. Thus, when he was passing, his shadow would be cast on them and they would be healed by this shadow. True to their expectations, Peter's shadow actually healed all these people. The fact that Jesus Christ was not physically present in this location, although he was spiritually, brings to the fore the role that faith, defined as the trust in an individual that what he or she desires, and is working and praying toward or expecting, will be done for him or her by God, plays in miracles. Being an avenue for multiple miracles to happen, the chances that an individual with x amount of faith, in a crowded gathering, will receive miracle(s) appears to be greater than those of his or her lone counterpart with the same x amount of faith.

Similar to the case of Peter, the Bible, in Acts 19:11–12 (RSV), also tells of mass miracles that God enabled the apostle Paul to perform, as follows: "God did extraordinary miracles by the hands of Paul, so that handkerchiefs or aprons were carried away from his body to the sick, and diseases left them and the evil spirits came out of them." In this account, God performed so many miracles through Paul that his personal effects taken to the sick were healing as effectively as his very hands. The recipients of the miracles, those who took them to the venues of the miracles, and the spectators can be said to have witnessed a new dimension to Jesus' kind of miracles, especially with Jesus not being physically present.

Yet Philip, another disciple of Jesus, is said in Acts 8:6–8 (World English Bible [WEB]) to have performed all kinds of miracles in his ministry after the ascension of Jesus to heaven. The biblical account says, "The multitudes listened with one accord to the things that were spoken by Philip, when they heard and saw the signs which he did. For unclean spirits came out of many of those who had them. They came out, crying with a loud voice. Many who had been paralyzed and lame were healed. There was great joy in that city." This undoubtedly is another series of multiple miracles among a multitude.

The kind of miracles performed by Peter, Paul, Philip, and other apostles, especially amid multitudes, are being reenacted in the contemporary world. Testimonies abound, here in Nigeria alone, of grand and mass miracles taking place in churches and crusade grounds amid crowds. In the televised, weekly program of Christ Embassy, a Pentecostal church in Lagos, Nigeria, tagged "Atmosphere of Miracles," it is usual to watch people not only becoming physically healed, but also rendering testimonies of other miracles that they had previously received.[5] Also televised are the occurrence and testimonies of miracles, especially of physical healing, at the Synagogue Church of Nations in Lagos, Nigeria. This particular church is so popular for its miracles that it has continued to attract people from many parts of the world. For example, although the church is located in Nigeria, it is usual to see many white people worshipping there regularly.[6]

On the strength of the visible evidence, the fact that these miracles are actually taking place is not in doubt. However, mixed reactions trail the occurrence of these miracles. While many skeptics agree that there is a supernatural power behind the miracles, they also insist that in many of the churches, the supernatural powers derive from the occult, voodoo, or sorcery. Several, for reasons of not being able to deny the evidence of their own eyes, simply insist that there must have been some arrangements behind the scene and that the testifiers must be confederates of the prophet or miracle worker. As alluded to in the beginning of this chapter, though miracles are not a monopoly of Christianity, there are different types of miracles, and miracles are actually in the eyes of the beholder; but if the manner in which Aaron's rod-turned-serpent swallowed Pharaoh's sorcerer's-rod-turned-serpents (Exodus 7:10–12) is anything to go by, miracles caused by Almighty God are the only genuine miracles. Nevertheless, the psychological processes that galvanize humans into states that are compatible with the occurrence of mass or multiple miracles can occur in all crowded gatherings.

Apart from watching or reading about miracles, real life witnessing of multiple miracles in Christian crusades further convinces one of the potential for enhancement that crowd psychology may lend to the probability of miracles. As a regular attendee of the monthly Holy Ghost service of the Redeemed Christian Church of God at the Redemption Camp, near Lagos, Nigeria, it is quite usual for me to see many people getting physically healed and many others testifying to other breakthroughs that they are convinced they got at previous Holy Ghost services.

Lee Grady's (2002) report on the Holy Ghost Congress 2001 goes a long way to corroborate this. Grady estimated the crowd on one of the days of a weeklong festival of faith to be in excess of 2 million people. He also vividly described how a shout that followed a prayer session shook the ground, a million fists raised into the air, and another million voices shouted the name of Jesus. Grady reported the events that led to a subsequent occurrence of mass miracles as follows (2002, 14): "The prayers continued, followed by more preaching, then more deafening music. When the next altar call was given at 3 AM, hundreds of men, women and children walked to the stage area to seek physical healing. Some of them left their crutches at the altar when they returned to their seats. They had found their miracle."

CONCLUSION

With Jesus' death, resurrection, and ascension to heaven, the Holy Spirit is the force through which God alters the course of nature to pave the way for the occurrence of miracles in the name of Jesus. For Christians, who discern that miracles come from God, the Holy Spirit underlies all the psychological processes to which people are subjected while immersed in a crowd,

ushering them into states that are compatible with receiving miracles from God. Specifically, from immersion in a crowd, through reduction in self-awareness, to deindividuation, contagion, and then to individuation through synchronicity and transcendence, the Holy Spirit mediates, while the entire process, complex as it may seem, is all an expression of faith.

This chapter set out to implicitly provide support to the proposal that people in crowds receive more and grander miracles than people who are alone. Although there is no empirical evidence to support this assertion, theoretical and conceptual analyses seem to provide some forms of support and ways of understanding this apparent reality. Besides, instances drawn from both the Bible and present-day events appear to converge at the same point, lending heuristic weight to the thesis. Against this background, it can be concluded that a higher realm of miraculous experiences characterizes crowds because their psychospirituality produces the altered states of consciousness that individuals in the crowd undergo. Theoretical and conceptual analyses have suggested that these products of crowd psychology are highly compatible with the states of mind that are best suited for receiving miracles.

NOTES

1. In Ibadan, a 1988 local newspaper's report of road repair efforts, which accidentally exhumed the fresh, undecomposed body of a man in Popo Yemoja, Ibadan, whose children later said he had died in the 1970s. In Iwo, my father's narration to me of the partial exhumation in 1997 of the fresh, undecomposed body of a family member, who had died as a very old woman in 1992.

2. This is my father's report to me in the 1980s of the story he was told at one of the annual Osun-Oshogbo festivals, which he attended as an invitee.

3. Two major Yoruba films on Sango that I watched: *Oba Koso* (1983) and *Ose Sango* (2002).

4. Story told in a sermon on prayer and praise by Pastor E.A. Adeboye during one of the monthly Holy Ghost services that I attended at the Redemption Camp near Lagos, Nigeria, in 2007.

5. "Atmosphere of Miracles": A broadcast of the proceedings of services of the Christ Embassy Ministries, Minaj Broadcasting Network, Nigeria, in 2007.

6. Television broadcasts of the proceedings of services at the Synagogue Church of Nations, Lagos Television, LTV, Lagos, Nigeria, in 2007.

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CHAPTER 10

Sacred Bleeding: The Language of Stigmata

Stanley Krippner and Jeffrey Kirkwood

Besides imagining the uncanny experience itself, what is likely captivating about stigmata, and accounts of most alleged miracles, for that matter, is that they open the possibility of an actual portal to divinity (Harper 1908). Stigmata are a peculiar phenomenon in that they are the most radical confirmation of the uniquely Christian experience and concept of liturgical time, which is "due to the fact that Christianity affirms the historicity of the person of Christ" and "unfolds in a *historical time sanctified by the incarnation of the son of God*" (Eliade 1991, 72). Without the figure of Christ and the rupture in profane time that he represents, stigmata would be nothing more than a morbid aberration, requiring nothing more than a purely physical, and even pathological, examination. However, stigmata occupy a complicated space in our imagination, one that demands empirical as well as mythical/structural investigation. In this chapter, our purpose will be to give a historical and empirical overview of the phenomenon through one purported case, while also looking for its contemporary implications.

This chapter takes two simultaneous vectors of approach to the phenomenon of stigmata. The first is one of causation, rooted in a venture to grasp how such phenomena as stigmata, which seems to resist conventional or naturalistic explanation, can make sense, either as the result of invisible psychological or anomalous forces or the equally hidden movements of deception. The other is an encounter with meaning that finds, in stigmata, a kind of

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religious language, whose iterations are essential to the viability of spiritual experience. In the former case, our intention is to determine whether one can even take seriously the suggestion that stigmata have ever been more than sophisticated legerdemain or superstition buried in an impenetrable history of repeated references and accounts. In the latter, we try to identify how such an exceptional reenactment of the crucifixion, rather than challenging religious structures, syntagmatically reinforces greater religious belief. This relies on a type of participation that is not merely an evangelical invocation of personal faith as a belief against empirical proof, but the affirmation of a whole history of beliefs that creates a structure and therefore allows such phenomena as alleged miracles to be comprehensible and, moreover, meaningful.

In the case of Amyr Amiden, the Muslim man with whom Stanley Krippner met in Brazil in 1993, and who underwent a number of stigmata-like experiences, the question is again twofold. Was Amiden's condition genuine, and if so, was it psychogenic, or was it attributable to something beyond ordinary powers of explanation? Assuming that it was more than trickery, the events only achieve significance through access to either a psychological framework or religious history. Satisfaction with a psychogenic explanation implies that while extremely uncommon, the conditions responsible for such phenomena are isolated to the individual case. In other words, there are no eternal verities to divine from the experience, and the events are not connected to a history greater than themselves. Reported miracles, such as nonpsychogenic stigmata, if they occur at all, are just the opposite, in that they create a connection between the single event and an immutable religious truth, or what Eliade (1959) would have called *sacred* and *profane time*. The structure of the religious belief gives the incidence of stigmata meaning, and in turn, stigmata reinforce belief in the crucifixion. As Karl Barth (1949, 28) noted,

> This decree of God was carried out in time, once for all, in the work and in the word of Jesus Christ, to which Article II of the Confession bears concrete testimony, "who suffered under Pontius Pilate, was crucified, dead and buried. . . ." Faith is man's answer to this historical existence and nature and action of God. Faith has to do with the God who is Himself historical and has fashioned a decree whose goal is history, and has set this history going and completed it.

Stigmata thus function to adduce and create a living Christian history as both temporal and eternal. The belief in stigmata is a belief in the historical Jesus, who believers allege and the gospels claim to have died on the cross.

The notion that Amiden's case can access the established religious meaning structures that allow us to call it stigmata is problematic in that, strictly speaking, he is not a part of the Christian history, and therefore what his affirmation of Jesus' suffering might mean is not clear. It could be that in

keeping with the global erosion of religious and cultural boundaries, Amiden represents a kind of religious poststructuralism. Or it could likewise be that he falls into an areligious space that merely parodies religious meaning or expresses some more profound forms of spirituality that operate above and outside of the forms of institutional religion.

THE HISTORY OF EVIDENCE: ST. FRANCIS TO PADRE PIO

Stigmata is the plural form of the noun *stigma*, a term derived from the Greek word for "mark" or "marking." As a religious phenomenon, it refers to physical markings on, or bleeding from, areas of the body corresponding to the alleged crucifixion wounds of Jesus Christ (Kelly et al. 2006). This includes the hands or wrists; feet; the side of the body, where Jesus is supposed to have been wounded by a Roman spear; the back and shoulders, from his carrying of the cross; and the forehead, where Jesus is believed to have worn a mock crown made of thorns. Its importance to religion is that stigmata reproduce the crucifixion in the present and can be seen as evidence of the religious reality created by that original event.

From the sixth century BCE to the fourth century CE, when crucifixion ended in Rome, it was a form of punishment inflicted on captives, criminals, pirates, and troublemakers.[1] Berger and Berger (1991, 408) claimed, "It is an enigmatic fact that no manifestations have ever been reported on the bodies of non-Christians." This makes sense, however, as the significance of Jesus' death does not reside in crucifixion as a method of punishment, but in the fact that Christians believe that Jesus was the son of God and the ultimate redeemer of humanity. Stigmata only become loaded events by way of reference to this fact, which is the source of all meaning in mainstream Christianity.

Although the first generally accepted instance of stigmata dates back to Francis of Assisi in 1224, Berger and Berger (1991, 408) suggest that they may have informed St. Paul's address to the Galatians, "I bear on my body the marks of the Lord Jesus" (Gal 6:17, Revised Standard Version [RSV]).[2] Whether Francis of Assisi was actually the first person to have experienced stigmata, he monopolizes religious and artistic memory of the phenomenon. Since then, there have been some 330 Roman Catholics, and a few Protestants, characterized as stigmatics, among them the German nun Anne Catherine Emmerich, the German saint Lidwina of Schiedam, the German mystic Theresa Neumann, and the Italian priest Padre Pio (Berger and Berger 1991, 408; Nickell 2000; Ratnoff 1969).

Thurston notes that the Roman Catholic church takes a cautious position regarding Padre Pio's stigmata, remaining (1952, 96) "wisely disdainful of abnormal favors of the psychophysical order in which hysterical and other

pathological causes, or even fraudulent simulation, may at any time play a part." The church's wariness is understandable if one considers the effect of allowing entrance to the power of the Son of God not moderated by the church:

> For many, Francis was not simply a model of pious humility, but a dangerously transgressive radical whose direct communion with God seemed to render the Church and its hierarchy superfluous. In receiving the wounds of Christ into his own flesh, he transgressed the boundaries of reason and nature. As the *alter Christus* (the other Christ), he went where even his closest companions could not follow him. (Kiely 1999, 35)

Nickell (2000) has produced several scenarios by which a person could simulate stigmata, namely, inflicting wounds on one's body which are hidden with cosmetics until the bleeding is expected to occur, and has even demonstrated one of them himself. As a result, the use of the term *stigmatics* in this report takes no position as to the etiology of the wounds. The caution of the church may be right, but it does not affect the power over Christian imagination held by St. Francis and some other stigmatics.

Most typically, visible stigmata have consisted of bruises, welts, and bleeding wounds on the hands, wrists, feet, head, back, and sides. Some experients bleed every day; some bleed every Friday or on particular Fridays. Their skin texture varies, from reddened epidermis and blood blisters to wounds that require bandaging. A few stigmatics have had 9 or 10 such marks on their body at once, but most have had less (Murphy 1992, 484). According to the Roman Catholic Church, to qualify as a stigmatic, the wounds need to be accompanied by feelings of ecstasy, or rapture, which, by his own account, Amyr Amiden experienced. Demanding that the wounds be paired with a feeling of ecstasy is the equivalent of demanding that the symbolic event be embedded in the greater history of Christianity—that the single instance be linked to an eternal truth.

These two conditions have been present in a number of relatively recent cases. Marie Rose Ferron, who moved from Canada to Rhode Island in 1925, was bedridden and partially paralyzed for the last decade of her life. In 1926, marks representing the wounds of Christ's flagellation appeared on her arms; in 1927, stigmata formed on her hands and feet; in 1928, punctures began to bleed on her forehead. She spent much of her time in prayer, and a number of devotees were attracted by her deep spirituality, despite her afflictions (Murphy 1992, 496).

Arthur Otto Moock, a resident of Hamburg, Germany, exhibited wounds on his hands, feet, and side that bled profusely every four weeks or so from 1933 to 1956. Not a Roman Catholic, and not particularly religious, he asked several physicians to cure him, but they had no success (Murphy 1992, 496). This may have been a case of what some observers have described as

hysterical stigmata, which appear in highly suggestible people, but without reports of ecstasy and other mystical phenomena.

Some psychoanalysts have provided psychodynamic explanations for these phenomena. For example, the psychiatrist Ernest Hadley (1930) described a patient who bled from his left armpit during at least seven regular monthly cycles. Hadley believed the bleeding represented his patient's identification with females. This pseudo-menstruation was conjectured to symbolize both a defense against sexual assault and female innocence; his patient had identified the armpit with the vagina since childhood. Lord (1957) added such motives as the desire to avoid menstruation by suffering periodic wounding, an urge to punish oneself for masturbatory impulses, and a longing to identify with a nonsexual lover. Most female experients are stigmatized between the ages of 15 and 50, the years during which women menstruate; stigmata, like periods, are usually cyclical.

In addition to these psychoanalytic explanations, Thurston (1952) believed that stigmata are of hysterical origin, and Wilson (1989) linked them to dissociative identity disorders. The case for the anomalous foundations of stigmata has been made by Summers (1950), while Nickell (1996, 1999, 2000) held they are self-induced. Nickell (1996) and other scoffers have often pointed to the case of Magdelena de la Cruz, who lived from 1487 to 1560. Her religious ecstasies and stigmata impressed the Spanish nobility for years, but eventually, she confessed that they were fraudulent. Maria de la Visitacion, born in 1556, was exposed by a fellow nun, who caught her painting a stigmatic wound onto her hand. Her physicians defended her, but the Inquisition's examiners scrubbed away her wounds to reveal unblemished flesh (Nickell 1996; Wilson 1989).

Nickell pointed out that a contemporary stigmatic, Katya Rivas from Bolivia, was filmed in her bed where (1999, 61) "the covers provided ample means for concealment of an object that might cut her skin." He even asserted that Francis of Assisi's stigmata may have been deceptions motivated by the saint's zealous imitation of Jesus Christ. However, Francis withheld news of the stigmata, and they were not revealed until after his death. Francis' confidants, Brother Elias and Brother Leo, attested to their appearance (Murphy 1992, 485), and since the early nineteenth century, many kinds of stigmata have been carefully documented, some by skeptical medical researchers (Murphy 1992, 486).

Kiely (1999) noted that since its inception as a religious concept, stigmata have been a vehicle for doubt. In his study of the appearance of Brother Leo in medieval and renaissance literary and artistic representation, Kiely underscored the notion that Leo was not a simple witness who testified to the reality of the event, but also of a changing representation of general social postures toward miracles, and possibly a symbolic manifestation of the

burden of faith. As Kiely framed it, Leo's relationship with Francis was its own kind of burden, one that did not involve the ecstasy of stigmata, nor the actual experience:

> Francis's "cross" may have been, among others, an extreme literal mindedness (some would call it zeal, others fanaticism) that led him to the agony of becoming an *alter Christus*. Leo's cross, more familiar to most of us—his nosiness, his need for proof, his restless conscience, his ambivalence, his spiritual timidity—apparently seemed to Francis heavy enough for one person. (Kiely 1999, 37)

Just as Leo did not serve as an impeccable confirmation of Francis' stigmata, the prominence of his depiction in works of art, and therefore reception as the bearer of the report's truth, is not simple. Leo was the "historical and symbolic figure of the flawed witness," at the center of the interplay between faith and doubt, and, as such, is as important as Francis himself (Kiely 1999, 38).

Louise Lateau and Eva McIsaac

Wilson (1989) has presented two case histories, Louise Lateau and Eva McIsaac, that argue against trickery as the sole explanation of stigmata. Lateau reported ecstatic experiences that accompanied her bleeding from points on her hands, feet, forehead, and side. These manifestations occurred with clockwork regularity every Friday up to her death in 1883 at the age of 33, resulting in a total of roughly 800 occurrences (Wilson 1989; Myers 1903, 493). At the age of 18, the first year in which her stigmata occurred, Lateau visited a physician specializing in so-called nervous disorders, who examined her and observed her condition. According to Wilson (1989, 40), "these scientific tests on Louise Lateau went as far as any at the present time. They indicate that in the case of Louise, at least, something genuinely spontaneous and free from physical contrivance was responsible for her bleedings."

A more recent case was that of Eva McIsaac, a Canadian housewife. Her wounds included a side wound manifesting and becoming particularly deep and painful. The wounds in her hands penetrated deeper "until they seemed to reach through to her palms, and those in her feet to the soles" (Wilson 1989, 54–55). Eva's wounds "remained visible but dry and pain-free during the rest of the week, but on Friday evenings between six and nine they flared up with such intensity that some witnesses are said to have fainted" (Wilson 1989, 54–55).

McIsaac freely made herself available for intensive medical examinations. One of these, in 1945, lasted for three weeks; another, in 1946, lasted for two weeks. "Such was the thoroughness and intensity of these that she was not

left alone for a single moment day or night" (Wilson, 1989, 55). A Protestant physician, one of McIsaac's observers, described the scene:

> Gradually the hands and the other wounds began to bleed. The wounds on the back bled only a few drops. . . . The others bled a good deal. . . . By nine o'clock her face was covered in blood from the head wounds and her hair was matted with it. (Wilson 1989, 56–57)

Wilson concluded (1989, 57), "Here we have a direct attestation of stigmatic wounds manifesting spontaneously under controlled conditions."

Most cases of stigmata were not subjected to such exhaustive examinations, and the scientific rigor that would satisfy contemporary skeptics did not exist at the time when many of the events transpired. Even granting thorough, unbiased observation and the absence of any intervention by a magician or sleight-of-hand expert, there are many ways to produce the appearance of wounds, ranging from layers of false skin to hidden vials of blood.

Amyr Amiden and the Expanding Vocabulary of Stigmata

Stanley Krippner's first meeting with the alleged stigmatic Amyr Amiden was on February 17, 1993, when a Brazilian psychologist, Margarida de Carvalho, and Krippner led a tour group of 20 people through Brazil. This trip was sponsored by the Institute of Noetic Sciences and included four days in Brasilia, where they spent an afternoon at the Foundation of the City of Peace. Amiden had agreed to meet with the group, through the invitation of Pierre Weil, director of the foundation.

Amiden told the group that he was born on July 5, 1941, and that he worked as an importer and also as a government workers' union secretary. At that time, he lived in Brasilia, the capital city of Brazil. Of Syrian and Iranian descent, Amiden had been raised in the Muslim faith but claimed to have found inspiration in all religions. A member of the group later wrote,

> I was sitting in the lunchroom about four feet behind Amyr at the City of Peace. I heard Dr. Weil say, "Here it goes again." His statement was in response to hearing something drop and bounce inside the room. Shortly thereafter, Stanley Krippner . . . walked over and retrieved a small polished black stone encased in mud from the floor. I watched with interest as they discussed it. At that moment, no one in our group, except Dr. Krippner, knew that Amyr seemingly manifested apports, i.e., appeared to be able to produce physical objects through mediumistic abilities. Dr. Krippner asked Amyr if he felt that the phenomena happened through the work of some spiritual force or entity operating in him. Dr. Krippner mentioned the name "Christ" in this dialogue. Instantly, Amyr began to bleed from his palms and the backs of his hands. A dark red mark also appeared on his

> forehead. This phenomenon, called stigmata, allegedly indicates that an individual so heavily identifies with Christ that they express the marks of the crucifixion. . . . Interestingly, Amyr is a Muslim although he was ecumenical in presenting his beliefs.

Another group member remembered,

> After arriving, we were conducted to the restaurant and had an excellent vegetarian lunch. Lunch was almost over and I was standing close to where Stan Krippner and a stranger were sitting. Suddenly, something fell to the ground with a slight noise. It looked like a small piece of mud about 2" by 1" by 1". I paid no attention, but Stan picked it up and found a smooth stone . . . inside, about 1/2" in diameter. . . . Whilst talking at lunch with Stan, the conversation with the stranger shifted to Jesus Christ. At this mention of Jesus, red spots appeared on the backs of each hand of the stranger and on the palms. We were invited to look at this manifestation of the stigmata. The stranger was introduced as Amyr Amiden. He is of medium height and has a grey beard. He was born in Brazil into an Islamic family, although all religions are the same to him now.

A third member of the group observed that "it first appeared to be a bruise on both hands, and then blood appeared on both surfaces of the hands and forehead," a recollection very similar to other members of the group.

Krippner recalled that beet salad had been served at lunch and speculated whether the red fluid that appeared on Amiden's body could have been beet juice; however, he was reluctant to ask permission to taste the fluid. After asking Amiden's permission, he invited the group to file past Amiden to observe the phenomenon.

Asked to reflect on an interview with Amiden, a member of the group recounted,

> Apparently, his father and grandfather were "sensitive." . . . All his siblings were "sensitive," but only he and his grandfather manifested "apports"—the anomalous appearance of objects with no easily discernible source. Amyr claims he "astral travels" and can travel at will and return with information which can be checked later. He says there have been reports of his bilocation, but he has no control or awareness when this occurs. He has healing abilities and has healed a few lepers in the early stages of their illness but not in later stages. Lights are often seen in his presence when apports occur.

In another among a series of unusual events with Amiden, Pierre Weil passed around a Communion chalice that had been resting on a table in the lecture room. One of the members present averred that "water was in the cup when I held it in the circle." Another remembered that

> several people claim that there was no water in the cup when they inspected it. However, they claim to have smelled blood and to have observed what they took to be dried blood in the chalice, as well as on the fabric that covered the table.
>
> Typically, blood has no discernable smell, so this sensation may have been imaginary or was made on the basis of other contents of the chalice.

Another group member noted that Weil

> showed us a chalice that Amyr held shortly before we arrived. What appeared to be blood covered a cross on one side of the chalice. Dr. Weil explained that when Amyr picked up the chalice, the blood exuded from the cross. I picked it up for a closer inspection and, after looking closely at the marks inside and out, I passed it around to the rest of our group. When it returned, created within it were several communion wafers that had not been there when it left my hands. To the best of my knowledge, the chalice was in the hands, or within plain sight, of our group the entire time.

In these accounts, there are two possible discrepancies. One person reported that there was dried blood "in the chalice," while another recalled blood "on one side of the chalice." One observer reported the anomalous appearance of "water" in the chalice, but another recalled the appearance of "communion wafers."

This session with Amiden was neither videotaped nor audiotaped, yet there was a general agreement regarding most of the anomalous events that occurred. There was not, however, a complete consensus about all of the relevant details of the experience.

In the evening after the chalice incident, Amiden accepted an invitation to have dinner at the visiting group's hotel. On this occasion, one participant audiotaped the conversation, and another videotaped it. The former later recalled,

> When the tape picked up the conversation, Amyr was relating an incident that had taken place at this hotel some time before—at the time of the inauguration of [Fernando Collor] the President of Brazil.

At that time, in Amyr's presence, blood had appeared on a crystal. At that time, someone had inquired as to the significance of this occurrence. Amyr had replied, at the time when the event occurred, that he believed it to be symbolic of the suffering that the Brazilian people would experience. Amyr further related to us that, as if to verify the precognitive impression, the very next day, the people of Brazil had their bank accounts impounded and began to suffer.

Several members of the group had questions for Amiden, whose answers were translated by de Carvalho and are excerpted here:

Questioner: What was the meaning of this blood?

Amiden: I think it was the blood of the Brazilian people. . . . The ex-president . . . did a terrible, crazed thing with our money. He held all the money of every Brazilian. . . . I saw the suffering. . . . It was bleeding, blood.

Questioner: How did you know this?

Amiden: Whenever I have information about something, I hear a feminine voice. I never see her, but it's a feminine voice that talks to me.

Questioner: This is the process?

Amiden: That's right. And this feminine voice told me that this whole thing in Brazil is a process of purification for the country.

Questioner: Is it the same feminine voice each time?

Amiden: Yes, it is.

Questioner: Are you conscious when you hear this?

Amiden: Yes, I am conscious. I always follow the voice. It's always a message for me. . . . I feed the poor people every 15 days. So I go to a very poor and violent neighborhood every 15 days and make soup for 300 people. And there was a time when the authorities wouldn't let me do this because they said I was bringing a violent crowd together and that was dangerous. And they said I was bringing criminals and prostitutes to this place. But perhaps one of the prostitutes was my sister in a former life. Yes, it's very difficult to help people. My father had told me to help feed people because with an empty stomach you can't hear words of wisdom.

Questioner: What do you do to grow spiritually?

Amiden: I live alone, so I have time to read the Bible, and [I read] about the Muslims and the Jews. They fight so much in the Middle East. But the suffering is for their development.

Questioner: They don't seem to be learning anything.

Amiden: It's a process they have to go through.

On the following day, several of the group remarked on Amiden's wearied appearance, an observation that accorded with Krippner's notes on Amiden's episodic experience:

> Every month something like this happens. . . . Before the phenomena occur the saliva tastes acidic. . . . He drinks much water, strong tea and coffee, loses weight, and takes many baths and showers. . . . The signs that phenomena would happen started a week ago Wednesday and lasted for 10 days. Blood will come in spots on his legs, then will disappear. He does considerable healing during this time.

Were these anomalous events what parapsychologists would refer to as *psi phenomena*? Parapsychology is the scientific study of psi phenomena—those interactions between organisms and their environment (including other organisms) that appear to bypass mainstream Western science's understanding of time, space, and energy. But a particular phenomenon can only be considered psi when it is performed under psi task conditions, those that rule out any ordinary explanation. Hence the events surrounding Amiden on February 17, 1993, were certainly puzzling, even anomalous. But they could not be classified as psi because they occurred under informal conditions that did not rule out alternative explanations. There are many psychic claimants who, on closer inspection, have turned out to be sleight-of-hand specialists.

What remains to investigate is what possible meaning Amiden's liberal appropriation of culturally and religiously specific vocabulary could mean. By *vocabulary*, we are referring to the landscape of symbols associated with and, in turn, defining a tradition. So, for instance, the bleeding of the Communion chalice and the appearance of wafers enters the province of religion by way of the Eucharist, which is the symbolic invocation of the Last Supper. In the absence of the Eucharist, the chalice is merely a cup, and the alleged miracle is not more than a convincing instance of conjuring.

Wilson (1989) reported a case similar to Amiden's in a Dominican nun known as Blessed Helen. She lived in a convent in Hungary and was observed repeatedly by her sister nuns to manifest "wounds in both hands, and in her feet, and her breast was wounded" (Wilson 1989, 21) and in whose presence flowers and other objects were said to have appeared. Needless to say, if a bouquet of flowers were to suddenly appear in the presence of a magician, the phenomenon would be conceptualized as legerdemain. Like Amiden, whose performance included a number of weighted symbols tied to Christianity, the presence of the nun and Helen's participation in a monastic order can be said to render the events a divine manifestation.

Return to Brasilia

In March 1994, Krippner returned to Brasilia to work with a seven-person team studying the anomalous phenomena occurring in the presence of Amyr Amiden, events over which he claimed to have little conscious control. They spent several hours a day with Amiden, who joined them after work (Krippner et al. 1994).

The settings for their meetings varied, but most of them were in Weil's office, where they sat in comfortable chairs around a table. Amiden drove to the foundation, was met in the lobby by one or more team members, and was escorted to the office so that there could be no occasion on which Amiden entered the room prior to the session. Several sessions were held in the campus Meditation House; Krippner investigated this site each morning to

be sure it contained no unusual objects that could later be labeled "materializations." When a restaurant was the setting, Amiden entered and left with other group members. From the time that he arrived at the foundation to the time that he departed, Amiden was in the presence of one or more members of the group.

When one or more team members felt that an unusual event had indeed occurred, three members of the team rated each of them on a 5-point Anomaly Observation Scale constructed by Krippner. It ranged from 1 (no apparent anomaly) to 5 (extraordinary degree of apparent anomaly). The mean of each set of ratings was used for comparative purposes; the research design stated that an event would have to have a mean rating of 2.1 or higher to be considered an "apparent anomaly," a nonordinal number selected to divide events that were felt to be easily understandable from those that were ambiguous or difficult to explain.

For example, four black marks on Weil's bedroom door were observed by another member of the team; this event was given a mean rating of 1.0 because Weil recalled that a poster had been taped on his door a week earlier. While the group was seated in Weil's office, a religious medallion appeared to drop onto the floor from the ceiling; this event received a mean rating of 5.0, as did the similar appearance of another medallion a few minutes later. A mean rating of 3.7 was given to a series of static-like blips heard when a radio was tuned between two bands, blips which answered questions given in both Portuguese and English (one blip for yes, two blips for no).

Over a span of eight days, a total of 20 sessions were held with Amiden; using the 5-point evaluation scale, 91 events were judged to have been apparently anomalous, while 6 events failed to meet the predetermined criteria. One of the anomalous events was the appearance of stigmata, which were observed on March 14 and 15.

The field notes Krippner made on those days stated, "Red, blood-like liquid is seen on the front and back of Amiden's right and left hands." Ruth Kelson's notes were similar; this physician's personal examination of Amiden's hands convinced her that the fluid was, indeed, blood. Krippner noted a beatific smile on Amiden's face when he presented his hands to exhibit the markings.

One day, Weil took a metal chalice from his bookcase and began to tell the group how small drops of blood and a Communion wafer had appeared in the chalice under anomalous conditions some months prior to the meeting. On the March 1994 occasion, Amiden asked a member of the group to allow the silver-colored chalice to balance itself on the palm of his hand, while he placed both of his hands at a one-inch to two-inch distance from the top of the object. This took about 15 seconds, at which time Weil asked someone to place the object on the table. Amiden asked everyone to place their hands around the chalice without touching the metal. Amiden placed his own hands

at a one-inch to two-inch distance from members whose hands were in closer proximity to the object. This lasted for 15 to 20 seconds, after which time Amiden suggested that everyone remove his or her hands.

Then Amiden placed his hands near the chalice without touching it. Weil picked up the chalice and observed that an oil-like liquid formation had appeared, which had a distinct perfume smell. Then the chalice was passed around so that everyone could see and smell the oil.

The group also had the opportunity to inspect a large photograph of Gandhi that Weil had brought from his bookcase. Weil reported that when Amiden had first seen it, he remarked that the man in the picture had been killed. This statement is not remarkable, given the widespread knowledge of Gandhi's assassination. However, the following event was quite remarkable; Weil then observed the appearance of two blotches of a blood-like substance on the picture, which were also observed by the group.

The results of these investigations were so provocative that plans were made for a more formal investigation utilizing sophisticated psychophysiological monitoring equipment and the assistance of a Brazilian magician trained in sleight-of-hand effects. Unfortunately, Amiden's physician, who had observed the complication in Amiden's cardiovascular and gastrointestinal problems following the March 1994 visit, deemed his health unsuitable for additional research purposes.

A PSYCHOPHYSIOLOGICAL PERSPECTIVE

Barber (1984, 118), who studied self-regulation of blood flow, introduced an example of how cognition, imagination, and emotions affect blood supply to the genital areas during sexual fantasizing. If these thoughts, images, and feelings can produce variations in blood supply, Barber proposed, it is likely that the blood flow to other parts of the body is continually affected by what people are thinking, imagining, and experiencing. By being deeply absorbed in imagining a physiological change, some individuals can evoke the same thoughts and feelings that are present when an actual physiological change occurs, hence stimulating the cells to produce the desired physiological change.

During the spontaneous disappearance of warts, some investigators (Samek 1931) have reported an inflammatory reaction in the dermis consisting of dilation of blood vessels, hyperemia (increased blood supply), edema, and perivascular infiltration of white blood cells. Hypnotic treatment of so-called fish-skin diseases may involve stimulation of the affected area's vascular bed, countering its disturbed metabolism (Kidd 1966). Changes in blood supply have also been implicated in rapid recovery from burns (Barber 1984, 87–93). Hypnotized individuals are able to reduce or eliminate bleeding in cases of upper gastrointestinal hemorrhage, and self-hypnosis has been found to be effective in patients with hemophilia (Spiegel and Vermutten

1994, 199–200). In addition, there is an extensive literature on individuals who can shift more blood to a specific area of the skin through biofeedback or other forms of self-regulation (Silverman and McGough 1971; Snyder and Nobel 1968). Murphy (1992, 545) observed that in biofeedback training, there is a transition from the largely dissociative processes that produce hysterical stigmata to a more self-reliant process. Cultivating the self-regulation skills (kinesthetic awareness and deliberate control of autonomic processes) that are basic human capacities, most people can learn to raise or lower their blood pressure, change their brain wave patterns, alter the flow of gastric acid, or modify other physiological functions.

Murphy (1992, 498) noted that the behavior and experiences of mystics are shaped by their respective cultures. Indian yogis, he pointed out, do not exhibit stigmata, nor do Eastern Orthodox monks. However, he also commented that the battle wounds of Mohammed have appeared on devout Islamic men. Interpreting stigmata within a psychophysiological framework suggests that it could occur to members of any faith who somaticize, and who are deeply involved in the crucifixion story (or, in the case of Muslims, in the battles involving Mohammed), given the proper circumstances. For example, in 1972, a young African American Baptist girl living in Oakland, California, manifested the stigmata from the palm of the left hand two to six times daily during a three-week period preceding Easter Sunday. Physiological and psychological tests did not detect serious pathology, and close scrutiny ruled out self-inflicted wounds. Her dreams frequently included biblical events; in the week before her bleeding began, she had read a book and had watched a television movie about the crucifixion (Early and Lifschutz 1974). She and her family professed to be religious, attending a Baptist church near their home; interview data revealed that the girl was preoccupied with Christ's suffering (Early and Lifschutz 1974, 200). In addition, there are three known Anglican stigmatics (Harrison 1994). Hence stigmatic phenomena are not limited to Roman Catholic adepts.

Spontaneous hemorrhages known as *psychogenic purpura* occur with no corresponding physical trauma both as a result of hypnosis and unconscious self-suggestion. *Purpura* refers to a dark, reddened area of the skin. The examiners of the girl in Oakland, California, observed that she had always been in excellent health and had never had a serious illness or accident. They concluded that profound, intense religious and emotional forces could have caused the stigmatic bleeding. Eventually, she also bled from both feet, from her right palm, from her right thorax, and from her forehead. Once the Easter season had passed, there was no recurrence of the stigmata.

One might also place considerable emphasis on the impact of artistic renditions of the crucifixion, almost all of which depict nails driven into the palms of Jesus' hands. In actuality, nails were probably driven into victims' wrists, where the bony structure would provide enough support to hold a

body on a cross for the time required for death to occur. Even so, nails were not depicted in representations of the crucifixion until the fifth century; the more common Roman practice was to bind the victim to the wood with thongs (Ratnoff 1969).

The historical origin of the phenomenon of stigmata is curiously coincidental with the manufacture of crosses bearing lifelike statues of Christ in his suffering; heretofore, the crosses had been bare. By the thirteenth century, the Christ who hung on a cross was drenched in red blood, and in the same century, Christian mystics began to experience the stigmata (Panati 1996, 123, 512). By the same token, stigmatic wounds in the wrists have become more common since media coverage has cast doubt on the historical veracity of palm wounds (Nickell 2000).

In addition, the experient's chest wound typically has been found to match the location portrayed in the local church; the wounds of one woman matched in position and size those shown on the crucifix before which she prayed (Thurston 1952). The Υ-shaped cross on the breast of Anne Emmerich resembled a prominent cross before which she had prayed as a child (Murphy 1992, 501–2). These observations lend more forceful support to the explanation of stigmata as self-inflicted injuries or a psychogenic origin to bleeding than any type of purported supernatural intervention.

Hypnotically Suggested Stigmata

The work of a German physician, Alfred Lechler (1933), supports this perspective. Lechler experimentally induced bleeding stigmata by hypnotic suggestions in a 29-year-old peasant woman who demonstrated high hypnotic susceptibility. Somewhat earlier, she had seen a film about Christ's crucifixion that left her with pains in her hands and feet. Lecher hypnotized the woman and suggested that she had been pierced by nails in the manner of the crucifixion. After several sessions, the peasant woman produced the markings of a crown of thorns on her forehead, an inflamed shoulder condition related to her imaginary carrying of the cross, and bloody tears similar to those shed by the celebrated mystic Theresa Neumann. Lechler photographed these manifestations (Lechler 1933). The crown of thorns was not a customary part of Roman crucifixion practices, and if the account is accurate, it might have been produced for Jesus, mocking his appellation as "King of the Jews."

The woman responded that she could feel the nails being driven into her hands and feet. Lechler and at least one nurse carefully observed her prior to, during, and after she received the suggestions. Wilson (1989, 97) comments,

> The significance of all this is profound. Effectively, Lechler can be said to have established more authoritatively than anyone, before or since, that

> spontaneous bleedings of the type attributed to stigmatics during the last seven centuries really do happen, and that these can be demonstrated under properly controlled conditions. He can also be said to have established that a fundamental key to the phenomena is hypnosis, and that the stigmatic, even without having been formally hypnotized seems to be, during his or her bleedings, in a mental and physical state effectively indistinguishable from hypnosis.

Wilson (1989, 126) continues,

> A really riveting feature is the extraordinary precision of the mechanism's conformity to the visualization that triggered it. Stigmata have been precisely positioned to conform with the wounds of a stigmatic's favorite crucifix. Or a wound may have taken on an exact shape such as a cross. Most dramatic of all, the mechanism seems able to mould the flesh into a feature resembling the head and bent-over point of an iron nail. It is as if something within the body has re-programmed it into a new form.

Psychogenic and Posttraumatic Bleeding

Reports of *psychogenic bleeding*, wounds that are linked to psychological reactions to accidents or surgery, support this perspective. When psychogenic bleeding has been recorded, the principal manifestation has been ecchymosis, rather than bleeding through the skin. A study of 27 cases of psychogenic bleeding at Case Western Reserve University observed that all cases were in women, that the bleeding began after injury or surgery, and that the attendant bruises were different from those brought on by trauma. However, among the 27 cases, there was frequent mention of headaches, seizures, cutaneous anesthesia, transient parethesias, nausea, vomiting, diarrhea, chest pains, and hyperventilation. Several women had a history of childhood or recent trauma (Ratnoff and Agle 1968), and a larger number had been bedridden for long periods of time (Nickell 2000).

Following such traumas as automobile accidents, there can be syndromes of spontaneous bleeding from body orifices as well as internal bleeding and painful spontaneous ecchymosis (passage of blood from ruptured blood vessels into skin tissue), often several months after the trauma. Gardner and Diamond (1955) have hypothesized that these individuals become sensitive to their own extravasated blood (i.e., blood that has flowed into surrounding tissues) at the time of the accident, and bleeding then occurred later due to internal sensitization. This posttraumatic syndrome appears to be more common among women than men.

In cutaneous anesthesia, there is no sense of touch in the skin; a severe diabetic who has no circulation in the toes will cut the toe but feel no pain. Transient parethesias (i.e., impaired skin sensations) are brief, episodic prickly sensations; sciatica can produce them as well.

THE STRUCTURAL APPROACH TO STIGMATA

The cases just described are helpful etiologically, but the bleeding was not interpreted as sacred or as stigmata. Cases that are studied as stigmata share four commonalities according to Lord (1957) and Ratnoff (1969):

1. The stigmatic has a history of somatization (see Wickramasekera 1995).
2. The stigmatic demonstrates a high degree of identification with a religious figure.
3. The bleeding occurs periodically during times of high affect.
4. There is considerable secondary gain derived from the stigmata.

All four of these commonalties (Lord 1957; Ratnoff 1969) can be said to have characterized Amyr Amiden. He had a history of somatic complaints. He demonstrated a high degree of identification with Jesus Christ and other religious figures. The bleeding occurred when he was deeply moved by a social situation or conversation. And as a result of the stigmata, he received attention and praise from a group of his supporters as well as from inquisitive outsiders.

Even so, Krippner and his team (1996) could not draw a definite conclusion as to whether this claimant's stigmata were parapsychological, of somatic origin, or the result of highly sophisticated legerdemain—much less anything that could be considered miraculous. Indeed, this claimant's phenomena are typical of the problems that exist in this area of study. Amiden's cancellation of a follow-up session, with a Brazilian magician present, could have been due to health problems, as alleged. Or it could have been motivated by a fear of exposure by an expert in sleight-of-hand effects. However, it provided Krippner and his associates an opportunity to survey the pertinent literature and to propose mechanisms that would lead to a naturalistic (rather than a supernatural) explanation of stigmata.

These four commonalities provide formal criteria for what may already be an intuition, namely, that certain activities qualify as stigmata and others do not. The impulse to establish criteria rests with the expectation that stigmata convey, or at least adduce, something in a fixed tradition. For stigmata, it is the most profound truth in Christian mythology. The internal/external distinction of stigmata is not so much a problem of verification, but of a type of semantics that guides our understanding of it. And "we must remind ourselves that, for Christianity, time is real because it has a meaning—the Redemption" (Eliade 1991, 143). In the same way, stigmata have a meaning because they are identifiable as the reincarnation of the historical event that organizes the religion. The crucifixion confers on stigmata a meaning that unifies the whole Christian historical community and operates like a grammatical force for determining what is and is not correct.

In his analysis of the Sandwich Islands and the sacrificial rituals that infamously claimed the life of Captain Cook, Marshall Sahlins (2004, 16) remarked,

> The genealogical tradition provides an invariant frame for all of these permutations, articulating the latest of the human heroes with the greatest of the gods—and allowing the possibility that the latter will reappear in the persons of the former.

What is important here is that the religious structures that prevail over the course of history allow the islanders to transform a man or woman of the present into an eternal figure and therefore confirm now what the myth invariably proves true. In Christianity, as stated before, faith is not a blind spot in reason, nor a grave leap into the impossible, as much as it is a willingness to recognize and participate in the historicity of Christ as a figure who inaugurated the time of redemption. The empirical likeness of a stigmatic to Jesus as a mythological figure is not as crucial as his or her situation in the history that allows for faith. Even the stigmata or ecstatic visions themselves must, as de Certeau notes, be relativized as "signs that would become a mirage if one were to stop there" (Brammer 1992, 29). The wounds only become stigmata by being expressible in the paradigmatic Christian language of the crucifixion that "radically historicize[s] each moment" (Brammer 1992, 35). In turn, the halo of scientific uncertainties surrounding Amiden's case misses some more essential difficulties about how his experience could possibly be comprehended as an embedded sign employing a religious grammar.

It appears as if Amiden's case straddles the line between being meaningful and simply fascinating. We immediately recognize in his wounds and the presence of Christian artifacts a wealth of explicit references to a long history of Christian experience that is not limited to Christ, but also includes medieval mysticism and the Eucharist. Amiden's own deep identification with the figure of Jesus offers a foundation for interpreting the events and leads us to speculate that it is an instance of stigmata. However, if we view stigmata as a structural device defining a narrow space in the history of Christianity, it is hard to know what it would mean at a deeper, more profound level.

Unlike Sahlins, who treats ritual paradigms as "invariant," it is possible, and even obvious, that the structures that confer meaning on an event evolve. Otherwise, the Roman Catholic Church's initial resistance to the Franciscan order would have left stigmata forever beyond the margins of the Christian faith. Instead, subtle variations in the manifestation of stigmata have the cumulative effect of altering its conceptual boundaries. But this does not occur so abruptly as to explode the structure altogether, which is how we can still comfortably refer to such phenomena as the four commonalities. What is missing in the manifestations of Amiden is a unitary framework to make

them comprehensible. Is he channeling the suffering of the Brazilian people as a Christ-like conduit? Or does he represent the convergence of monotheistic religions? The pantheistic and vaguely political invocations presented in these manifestations seem at odds with the use of potent Christian traditions. A rabid cynic might claim that he empties dense and familiar emotionally and historically charged symbols of their original content to use them as a vehicle for a confused message of world peace. No doubt, given the powerful possibility of psychosomatic phenomena, this could occur unconsciously. But the fact remains that it is nearly impossible to locate Amiden's experience as one that falls within the bounds of a single religious tradition. Moreover, his comments in the interview lead us to question whether his stigmatic-like experiences can communicate shared meanings for the purpose of reinforcing existing religious structures and reasserting eternal verities in everyday life, or if they are just confined to a fantastic version of everyday life. There is also the possibility that Amiden is an exemplar of a poststructural or postmodern movement that immanently unhinges long-standing beliefs and traditions, while still remaining sincere.

In his discussion of postmodernity, Gergen speaks of the (1991, 7) "plurality of voices vying for the right to reality." Some visitors to Florence panic before a Raphael masterpiece; others go into a frenzy when confronted with a Caravaggio painting; still others collapse at the feet of Michelangelo's statue of David. At least once a month, a foreign tourist is rushed to the psychiatric ward of Florence's Santa Maria Nuova Hospital, suffering from an acute mental dysfunction brought on by an encounter with the city's art treasures (Kroker, Kroker, and Cook 1989, 150). Mother Ann, the founder of the Shakers, experienced an episode of stigmata when, during a religious ecstasy, blood allegedly seeped through the pores of her skin (Ratnoff 1969). In 1972 (as noted previously), a young Baptist girl was observed to manifest the stigmata (Early and Lifschutz 1974). In 1980, a medical journal told of a woman who manifested the stigmata while singing in a Pentecostal choir; she gave birth to a child who subsequently exhibited stigmata as well (Fisher and Kollar 1980). In 1993, Krippner and his group observed a man raised as a Muslim manifest stigmata-like phenomena. This crossing of denominational lines, for the sake of extraordinary occurrences, may be a characteristic of the postmodern age. It is surely no accident that Amiden's unbridled association of Christian icons with the Brazilian national plight, an awareness of contemporary Middle Eastern politics, and the acknowledgment of Gandhi coalesce in a series of spiritual manifestations.

Postmodernism questions voices of authority as well as extant models of the human being. As Wilson (1989, 100) commented,

> The truly significant feature is that the flesh really does change, in an extraordinarily dramatic way, in response to mental activity, and that the

> power of mind over matter is phenomenally more powerful than previously thought possible. . . .
>
> If the mind really can spontaneously produce wounds in this way, can it also be persuaded to do the reverse? Can it stem the bleeding of a hemophiliac, or shrink a malignant tumor?

Stigmata are not merely a relic of an era when superstition reigned. These phenomena may be reframed in terms of recent advances in mind-body medicine (e.g., Dienstfrey 1991) and applied psychophysiology (e.g., Wickramasekera 1995), providing clues for the alleviation of human suffering. And in the spirit of postmodernism, it is imperative to locate the mythic, structural, and narrative intersections that allow for humans to reinforce old meanings and generate new ones.

NOTES

1. Persians, Assyrians, Carthaginians, and Greeks were among the other early civilizations that practiced crucifixion. But for about 800 years, the Romans surpassed them all, crucifying some 500 people per day following the Jewish revolt ending in 70 CE, with the conquest of Jerusalem and the destruction of the Second Temple.
2. All biblical references are from the Revised Standard Version.

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CHAPTER 11

Miracles in Kongo Religious History: Evaluating the Ritual Healing Theory

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Kongo religious history provides cases useful for evaluating hypotheses derived from the *ritual healing theory*. This theory argues that, over many millennia, groups of genes (genotypes) governing dissociative and hypnotic capacities reduced the psychological effects of trauma. These genotypes ultimately provided the basis for human religiosity. The genotypes, allowing dissociation and hypnosis, provided greater benefits to hominids/humans participating in therapeutic rituals based on dissociative/hypnotic processes. The selected genes facilitated anomalous and visionary experiences, labeled within some cultures as miraculous. Apparitions, visions, waking extrasensory perceptions, paranormal dreams, out-of-body and near-death experiences, and psychokinesis (unexplained movement of objects) generated beliefs in spirits, souls, life after death, and magical abilities—the foundations of shamanism, humankind's first religious form. This theory is evaluated through analysis of Kongo religious history. Kongo history describes recurring cycles of dissociative religious practitioners performing rituals benefiting those with hypnotic/dissociative ability. These practitioners and their followers report miraculous/anomalous perceptions whose forms coincide with those found all over the world. These correspondences support the argument that such perceptions have physiological basis. Consequently, findings support the ritual healing theory.

English dictionaries define *miracles* as events surpassing known human or natural powers. Such events are often ascribed to supernatural causes, most typically to God. Yet various cultures do not distinguish natural from supernatural causes, and some do not conceive of a single god as intervening

in human affairs. Some definitions of the miraculous use scientific evaluation as a standard—events thought to exceed scientific explanation are labeled as miraculous or paranormal. Such definitions are not fully adequate as questions regarding the authenticity of individual miracles, or of miracles in general, have not been resolved (McClenon 1984). As a result, scientists and theologians do not agree regarding the incidence and nature of miracles.

This chapter uses a cross-cultural perspective to argue that particular experiences have physiological bases, indicated by universal features, and that such experiences shape folk religious beliefs (McClenon 1994, 1997a, 1997b, 2002a, 2002b, 2006a, 2006b). Although scientists disagree regarding explanations of these experiences, they can test hypotheses regarding their incidence and impact. Much evidence indicates that visions, apparitions, waking extrasensory perception, paranormal dreams, psychokinesis (unexplained movement of objects), and out-of-body and near-death experiences have shaped beliefs regarding spirits, souls, life after death, and magical abilities (McClenon 1994). Issues regarding the degree to which scientific theories explain these perceptions are beyond the scope of this chapter. For the sake of convenience, these experiential forms will be referred to as anomalous, even though some researchers regard certain experiential forms to be explained within present scientific paradigms; apparitions and out-of-body experiences, for example, are attributed to activation of cholinergic processes in the brain.

This chapter reviews cases from Kongo religious history to evaluate a theory explaining how propensities for anomalous experience have evolved through evolutionary processes. Within this evolutionary paradigm, religiosity is a *phenotype*, an existing behavioral trait associated with physiological structures, derived from a *genotype*, a corresponding collection of genes. Religiosity can be measured through questionnaire scales—but the exact number of genes affecting the various dimensions of religiosity has yet to be determined. Within this paradigm, genes for religiosity are thought to be switched on or off as a result of an organism's experience. As a result, genotypes do not govern behavior, but provide patterns within which traits are shaped by environment. Religious phenotypes vary among individuals, taking different forms in response to corresponding genotypes affected by environment.

Much evidence indicates that religious genotypes exist. Twin studies demonstrate that religious attitudes, interests, practices, and associated hypnotic processes have genetic bases (Waller et al. 1990; D'Onofrio et al. 1999; Koenig et al. 2005; Duke 1969; Morgan 1973; Morgan, Hilgard, and Davert 1970). It would be surprising if a universal practice, such as religion, did not have a genetic basis. Researchers find that all other universal characteristics, such as psychological variables, have genetic bases (Carey 2003).

Some theorists argue that so-called religious genes provide survival advantages to groups, allowing more religious groups to replace groups lacking the group religion genes (Wilson 2002). Evolutionists refer to this as a *group selection theory*, an orientation that often appeals to social scientists focusing on culture. Most evolutionists reject this position, arguing that selection occurs at the gene, rather than group, level (Dawkins 1999; Parker 1978; Wright 1994). For a gene to be selected at the group level, mechanisms must prevent those lacking the gene from gaining equivalent advantages merely by being in the group. If individuals pass from group to group (as is observed among primates), group selection models are improbable since those lacking the specific gene would not be penalized.

Religiosity genes, assumed to generate cohesiveness, would not become prevalent if those lacking them benefited from being in the cohesive group. Second, religion is not the only mechanism creating cohesiveness. Primates, lacking religiosity, have other genetic propensities that cause them to remain in groups. Those lacking cohesiveness genes tend to wander off, are exposed to predators, and die without progeny. The hypothesized religiosity genes, whose major function involves creating cohesiveness, would need to be more powerful in fulfilling this function than existing nonreligious genes in order to replace them. If group religiosity genes exist, we would expect to find example cases (phenotypes) of religious groups replacing other groups within the histories of all societies. Although it is possible that historical analysis is unable to detect group selection processes, an inability to find example cases renders group selection theory less plausible.

The frequency and nature of genes associated with perception illustrate evolutionary selection at the gene level. Hominid olfactory capacity, for example, declined as hand dexterity increased, even though detection of odors provides survival benefits. The brain structures governing perception are limited by skull space, and as one capacity increases, another declines. Better hand coordination meant a reduction of other phenotypes. Group selection theorists must provide evidence that religious groups replaced less religious groups—merely pointing out functions of religion is inadequate.

An alternate position, the ritual healing theory, argues that selection tends to occur at the genotype, rather than group, level. Hominid rituals, involving dissociation and altered states of consciousness, provided benefits due to hypnotic and placebo processes. As a result, hominids with genes allowing hypnotic response had survival advantages. Over the millennia, healing rituals shaped the human propensity to go into trance and to perceive anomalous experiences such as apparitions, waking extrasensory perceptions, paranormal dreams, psychokinesis, and out-of-body and near-death experiences. The theory argues that these experiences generate beliefs in spirits, souls, life after death, and magical abilities.

This theory can be evaluated:

1. The folklore and religious history of any ethnic group can be analyzed. All groups should report ritual healing based on dissociative processes. The theory specifies that patterns within history reflect hypothesized evolutionary processes—certain people tend to be more dissociative, and these people are more likely to become spiritual healers, particularly aiding those suffering from disorders derived from dissociative propensity. The theory argues that such healers continually emerge but are particularly prevalent during social crisis.
2. Anomalous experience accounts collected from any ethnic group can be analyzed. All societies should provide folklore with similar forms of anomalous experience since the theory hypothesizes that these experiences have physiological basis.
3. Survey research should find that hypothesized variables related to ritual healing are significantly correlated. These variables include childhood trauma, dissociative and hypnotic experience, propensity for anomalous experience and belief, and propensity to respond to ritual/hypnotic suggestion. Such studies would allow development of questionnaire scales identifying those high in the hypothesized capacities—and these scales would be valuable to clinicians treating mental problems and psychosomatic disorders. Geneticists could use such scales to identify genes providing the basis for factors related to spirituality, the individualized form of religiosity.

This chapter focuses on the first and second strategies. Previous studies provide a foundation for the overall research program. Residents of northeastern North Carolina (McClenon 2002b), anthropologists doing fieldwork (McClenon and Nooney 2002), elite U.S. scientists (McClenon 1984), and students at three colleges in the United States, three colleges in China, and one college in Japan (McClenon 2000, 2002a, 2002b) report common, recurring anomalous experiences. These experiential forms include apparitions, waking extrasensory perception, paranormal dreams, out-of-body and near-death experience, and psychokinesis. The cross-cultural consistency of these forms implies physiological bases. The ritual healing theory predicts that these experiential forms can be found in the folklore and religious history of any ethnic group. Studies of spiritual healers in Korea, the Philippines, Okinawa, Sri Lanka, Taiwan, Thailand, and the United States show common elements within their biographies (McClenon 1994). Healers report that spontaneous experiences created profound beliefs in spirits, souls, life after death, and magical abilities—elements in the ideologies they use for healing. Anthropologists have noted common elements within spiritual healing practices all over the world, elements associated with hypnosis and placebo effects (McClenon 2002b).

Ritual healing processes could occur concurrently with group selection processes. The evolution of genotypes allowing human culture affected selection of religiosity genotypes. It is beyond the scope of this chapter to discuss the complexities of cultural evolution. These complexities are so great that conclusions drawn from historical analysis of any one ethnic group must be tentative. The present study is presented as a contribution to the discussion of the relationship between genes and culture, with the recognition that genes and culture evolve together (Richerson and Boyd 2005).

KONGO RELIGIOUS HISTORY: AN EXAMPLE CASE

This chapter evaluates the ritual healing theory through content analysis of cases drawn from Kongo religious history. *Kongo* refers to ethnic groups (the BaKongo or Kongo people) prevalent within an area divided since 1895 among the Republic of Congo (formerly French Congo), the Democratic Republic of the Congo (formerly Zaire, formerly Belgian Congo), and Angola (with Cabinda, formerly a Portuguese colony). This history contains multiple generations experiencing high mortality rates, of interest due to potential for evolutionary change. Precolonial BaKongo were plagued by recurring draughts, often one per generation, producing migration and reduction of populations by over 50 percent. These climatic cycles contributed to hierarchical slavery systems (Miller 1988). Encounters with the Portuguese, beginning in 1482, led to a merchant capitalist era and destabilizing, exploitative slave trade (Edgerton 2002; Miller 1988). Later, King Leopold II of Belgium created and ruled the Free Congo State (1885–1908), resulting in the death of about 10 million people—half the population. Belgian and French colonial rule led to continued social instability, exploitation, and economic underdevelopment (Edgerton 2002; Forbath 1977; Hochschild 1998). Independence in 1960 meant tyranny, corruption, police brutality, hunger, malnutrition, civil wars, and an ever shorter life expectancy (Edgerton 2000, 246).

Ritual Healing Theory Hypotheses

The ritual healing theory provides hypotheses regarding patterns robust enough to be detected in historical accounts:

1. Dissociative propensity is more prevalent during generations subject to severe stress since trauma triggers dissociative genotypes to manifest as phenotypes.
2. Dissociative individuals tend to suffer from psychologically based disorders, to be healed through ritual processes, to experience anomalous perceptions generating belief in spirits, souls, life after death, and magical abilities, and to devise, accept, and practice rituals beneficial due to hypnotic and placebo effects.

3. The most common forms of anomalous and visionary experience have universal features, derived from physiological bases. These experiences are apparitions, waking extrasensory perceptions, paranormal dreams, out-of-body and near-death experiences, psychokinesis, and spiritual healing. These experiential forms are hypothesized to exist in the folklore of all societies.
4. Therapeutic rituals devised by dissociative individuals are evaluated in the religious marketplace. Successful practices attract many followers, some of whom experience hypnotic and placebo benefits. Historical analysis of any ethnic group should reveal examples of these processes.

Historical Analysis

Few historical analyses have been applied to theories regarding religion. One study, an analysis of Iceland's religious history, refutes arguments regarding religion's *social glue* (Swatos and Gissurarson 1997). Rather than religious beliefs evolving from collective needs, as Durkheim (1995) and group selection theorists suppose, Iceland's history portrays experiential processes generating innovative ideologies. For example, an important spiritualist medium, Indriði Indriðason, captured the attention of Icelandic audiences in the early 1900s. He and other performers were sufficiently compelling that Spiritualist beliefs became an important element in Iceland's religious heritage. Swatos and Gissurarson (1997) portray how anomalous perceptions shaped cultural processes in a manner not predicted by group selection models. People adopted specific beliefs because they perceived events that implied spirits, souls, life after death, and magical abilities, not because their religion provided a social glue inducing unity.

Kongo religious history provides an alternate arena for analysis. Cases are derived from (1) indigenous Kongo religion, (2) the introduction of Christianity after 1482, (3) the Christian prophet Dona Beatriz (1686–1706), (4) Simon Kimbangu and the Kimbanguist Church (1921–1960), and (5) modern Kongo prophets (1960 to present). Although there is much cultural variation among the BaKongo, analysis of the literature pertaining to this ethnic group allows evaluation of ritual healing hypotheses.

Indigenous Kongo Religion

Pre-European Kongo religions included a variety of cosmologies based on a "process of continuous revelation . . . that characterized African religion in general" (Thornton 2002, 73–74). Certain practitioners went into trance, communicated with spirits, and gained information valuable for their community.

This pattern seemingly evolved from the same physiological processes allowing shamanism, the foundation of all later religions (Winkelman 1992,

2000). Anthropological studies indicate that all hunter-gatherer societies have shamans, individuals who go into trance, gain information about the spirit world, and use this information for healing. Anthropologists argue that as hunter-gatherer societies devised more complex technologies and become sedentary, their religious healing systems changed correspondingly, reflecting increased social complexity (Winkelman 1992, 2000). The ritual healing theory argues that religion's physiological basis continued to shape spiritual healing practices, producing religious-medical systems still based on hypnotic and placebo effects.

Kongo religions, encountered by the Portuguese in 1482, reflected the Congo Kingdom's hierarchical social structure. Its cosmology included four basic domains: (1) a powerful, but distant, god (Nzambi Mpungu), whose actions and healing powers were influenced by (2) the king *(mfumu)*, who had the power to authorize executions; (3) ritual experts (singular: *nganga*), who practiced beneficial magic; and (4) sorcerer/witches *(nkoki)*, who practiced harmful magic. Ritual experts included a variety of practitioners engaging in healing, divination, and protection. These experts, and the king, were expected to control magical powers for the common good. Sorcerers and witches, on the other hand, used magical skills to create discord and illness. Activities and roles on the earthly plane were associated with equivalent activities and roles on the spiritual plane.

Although Kongo ritual practices varied widely among localities, recurring patterns included healing, spiritual protection, and negative magic. A prevalent belief was that sorcerers/witches caused problems. In some areas, ancestral spirits might also create afflictions. Victims gained relief or protection by having a magical specialist construct a statue carved in human likeness or made out of basketwork (MacGaffey 1986). Missionaries condemned these charms as fetishes. Alternate methods included identifying a living sorcerer and subjecting this individual to ritual trial—requiring the accused to drink poison, for example, with survival indicating innocence. Kongo religion, transported by slaves to the Americas, contributed to rootlore, voodoo, and other Africa-based traditions in the New World (McClenon 2005b).

Although witchcraft systems fulfill social functions, it seems doubtful that Durkheim would have formulated his religion-as-society theory if he had used Kongo history as his single example case. Sorcery/witchcraft systems focus on labeling deviance, rather than worshiping the collectivity. Although Durkheim had much to say about the functions of labeling deviance, he was not concerned with the evolutionary mechanisms by which such systems evolved. Examples of the dysfunctions of witchcraft abound, even among modern BaKongo. In 2001, for example, 394 northeastern Kongolese were killed in a hunt for suspected witches, and 89 people were arrested for these murders (Edgerton 2002, 236). Witchcraft systems may be functional when deviants "deserve" to be labeled as witches and when discussions of cases are

psychologically perceptive (MacGaffey 1986, 161). Evaluations of costs and benefits are unclear. Historians provide no example case of a group practicing witchcraft replacing one lacking such beliefs.

Historical analysis allows insights regarding the degree that gene flow occurred among competing groups. Precolonial central Africa varied enormously in terms of topography, soils, rainfall, vegetation, and resources. Population pressure, coupled with recurring droughts, resulted in major, periodic immigrations. Desperate people were forced into dependency, contributing to lordship, tribute, and slavery systems. Rulers' wealth and power were measured in numbers of subservient humans. Historical data imply that gene flow within hierarchical systems was prevalent. Rather than genocide being common (portraying group selection), slavery systems were the norm (Miller 1988). Such observations reduce faith in group selection models.

Discussions of precontact BaKongo support the ritual healing theory. Magical practitioners provided rituals generating hypnotic and placebo effects. Historical and anthropological documents describe certain people having greater propensity for trance, anomalous experience, and performance ability (MacGaffey 1986). Charms (fetishes) seemingly derived their power from hypnotic and placebo processes. Dissociative people, better able to suspend critical functions, gained greater psychological protection.

As predicted by the ritual healing theory, historians (and their informants) describe anomalous experiences as foundations for religious belief. Thornton (2002, 75) mentions two near-death experiences as supporting belief in life after death. In one case, "a woman who had been sacrificed . . . returned from the dead to report that her services in the Other World were not needed." These stories have narrative structures equivalent to near-death experiences found all over the world and throughout all eras. Although we cannot determine the degree that such accounts reflect spiritual realities, it is logical to assume that brain structures and common physiological processes contribute to recurring features. In parallel fashion, Laman (1962) describes apparitions as central to indigenous belief. BaKongo perceived deceased relatives in manners equivalent to those of other societies, generating similar beliefs in spirits, souls, and life after death.

The Introduction of Christianity

When the first Portuguese missionaries arrived in 1491, they found basic correspondence between Kongo and Christian religious concepts (finding of similar concepts regarding spirits, souls, life after death, and magical abilities supports the ritual healing theory). Among the early rulers attracted to Christianity was King Mbemba Nzinga, who took on the name Alfonso (ruling 1506–1543). The scarcity of Portuguese priests, and the equivalency of doctrinal elements, resulted in a blending of Christian and pagan practices.

Terms for magical practitioners, for example, were applied to Catholic priests, and baptism became merely another magical ritual (MacGaffey 1986). Over time, the impact of Christian beliefs declined. One traveler noted, in 1857, that "crosses were to be seen everywhere but . . . for the Congolese people they were simply another of their many fetishes and had no Christian significance" (Edgerton 2002, 28). As during precontact eras, Christian rituals would have provided greater benefits to those more open to suggestion.

Historians do not portray early Kongo Christianity as social glue. The slave trade, supported and practiced by many Portuguese priests, destabilized the Congo Kingdom, resulting in social and environmental disaster. "At least once each century during the slaving era ecological an epidemiological crises reaches intensities sufficient to eliminate perhaps a third to a half or more of local populations" (Miller 1988, 156). Although some might argue that Christianity was functional in that it justified oppression, thereby contributing to social cohesiveness, the evolutionary effect is unclear. Many elements within Congo history support the argument that there are sick societies and that not all long-lasting elements within a culture are functional (Edgerton 1992).

Descriptions of military conflicts do not support group selection models. For example, in the mid-1500s, the Yakas, a cannibalistic warrior army, "focused their entire social structure around their fighting men. . . . They killed their own babies, burying them alive at birth, so as not to be hindered on their relentless march, and . . . adopted the children of the peoples they conquered and made them warriors in their army" (Forbath 1977, 125). The Congo Kingdom, weakened by the slave trade, was helpless against these people. The king, his courts, and the entire Portuguese settlement were forced to flee. As a result, hundreds of thousands of homeless people perished from famine and bubonic plague. Because the slavery trade was disrupted by this slaughter, the king of Portugal, in 1571, sent an army of 600 soldiers, slavers, and adventurers to aid the remnants of the Kongo army. This force drove back the Yakas—who were

> defeated but not destroyed, and they remained a force of chaos and turmoil in the Congo River basin for years. The country-side was stricken by plague and famine and torn apart by wars; every chief and province lord was in open revolt, and slavers, traders, soldiers of fortune, and adventurers of every ilk infested the realm. (Forbath 1977, 132)

This case, and many other accounts of Kongo military conflicts, do not provide clear examples supporting group selection theory; there is no mention of religious groups replacing less religious groups. Proponents of this theory might argue that there is no need to find clear examples of actual selection for the theory to be valid—that religion's social glue genotypes are so evenly distributed in modern populations that group replacement

cannot be detected during historical times. Future geneticists might test this hypothesis by determining the nature and antiquity of these social glue genotypes.

On the other hand, Kongo history includes many elements illustrating the ritual healing theory. As during all eras, anomalous experiences, particularly spiritual healing, supported religious beliefs. During the first great battle between Alfonso's army and his native foes, enemy troops retreated after seeing a white cross and armored horsemen in the sky, apparitions thought to prove the validity of Christianity (Thornton 1998, 33). Similar stories of apparitions are part of the folklore in all societies, and the fact that stories emerge collectively does not negate their power. Christianity itself is based on a series of apparitional accounts justifying belief in life after death. Among the BaKongo, Christianity was accepted, in part, because of its perceived magical power, and such stories were believed because they were parallel to spontaneous individual visionary and apparitional experiences.

The ritual healing theory does not deny that social processes affect conversion. Horton (1971, 1975), for example, argues that world religions provide universalistic means for overcoming the boundaries of local communities. His theory explains the prevalence of Christian and Moslem faiths in Africa. Yet this theory fails to portray the dynamics of individual belief. As with many social theories, it tends to ignore the stories people tell explaining why they believe as they do. As a consequence, many believers find such social explanations offensive. Most BaKongo did not perceive themselves as converting to Christianity to gain universalistic perspectives but because Christianity seemed more effective for healing, magic, and solving real problems. People more open to the magical suggestions of Christianity benefited most.

The Christian Prophet Dona Beatriz Kimpa Vita

Dona Beatriz Kimpa Vita (1684–1706) experienced visions at an early age. "To her family and friends these visions were a sign that she was spiritually gifted, and people paid attention to her and treated her as a special person" (Thornton 1998, 10). Her biography fits that of a *nganga*, a dissociative possessor of spiritual power who contacts beings from the Other World and can be possessed by them:

> A possessed nganga, such as nganga ngombo, would go into a trance . . . commonly through various forms of hypnosis induced by drumming, dancing, or simply rhythmic chanting and hand clapping. Once this state was achieved, some being from the Other World would enter the nganga's head, and then use his or her vocal cords to speak. (Thornton 1998, 54)

While an adolescent, Dona Beatriz was initiated into the Kimpasi society. Initiates were tied up and carried to a special compound, where they

remained for some time. They learned a special religious language, swore an oath of secrecy, and gained the ability to go into trance in order to address both individual and social problems (Thornton 1998, 56–58).

Dona Beatriz was one of various Christians during her era reporting visions. The size of a visionary's audience was determined by trance performance, magical skills, and capacity to generate stories regarding miraculous cures. An old woman, Mafuta, for example, attracted crowds after she reported visions and discovered a curious stone, shaped like a man's head, thought to be that of Jesus. She healed people and told of her visions of the Virgin Mary, who counseled repentance (Thornton 1998, 108).

In 1704, Dona Beatriz fell ill and experienced a vision of Saint Anthony. Her continuing visions led her to believe that Jesus and Saint Anthony were born in the Congo and that, through her preaching, she could resolve the political divisions which eventually led to civil war. Her healing ability attracted large crowds, and many people practiced the innovative rituals she prescribed. Her opposition to church corruption stimulated official alarm, and in 1706, a local king arrested her. Soon afterward, with the support of Christian missionaries, she was burned at the stake. Her movement is regarded as the first documented example of Africanized Christianity.

Dona Beatriz's biography does not portray religion as social glue. Although some people may have been unified by their attraction to her doctrines, the net result was social turmoil. On the other hand, her story illustrates how dissociative people react to difficult environments. They suffer illnesses (often psychosomatic), experience visions providing innovative doctrines, and, if socially skillful, launch prophetic movements. Their ritual performances benefit dissociative people exposed to their suggestions. The history of Dona Beatriz illustrates the recurring elements specified by the ritual healing theory: dissociative people in all eras report anomalous experiences and engage in spiritual healing, benefiting those open to therapeutic suggestion. Although established religions often oppose these movements, recurring patterns imply a physiological basis.

Simon Kimbangu

Like Dona Beatriz, Simon Kimbangu (1889–1951) grew up during an era of social turmoil. The agents of King Leopold II plundered the Congo's ivory and rubber, contributing to the death of half the Kongo population between 1885 and 1908 (Hochschild 1998). In 1918, a major flu epidemic killed thousands, while forced labor extended the BaKongo's ordeal. Kimbangu, a teacher in a mission school, came to believe that European missionaries had omitted important elements from Christ's teachings. As did most BaKongo, he observed that missionary hospitals were unable to cure African forms of illness and that European Christianity could not end the evils of colonialism. Many

BaKongo perceived that Christianity failed to prevent witches from causing the unemployment, accidents, and psychological distress they experienced.

In March 1921, Kimbangu heard a voice telling him to preach a more appropriate Gospel. As a Kimbanguist document stated, it appeared that the missionaries only enriched themselves and cared not for the sheep (Janzen and MacGaffey 1974, 131). Soon afterward, the Holy Spirit compelled Kimbangu to go to a sick child's house, where "he laid hands on it and prayed, whereupon he was subjected to violent convulsions. The child, however, was cured of its sickness and put to its mother's breast" (Andersson 1958, 51). Church traditions state that he then performed many other miracles such as raising a child from the dead. Rumors spread of his success, and in April and May, he attracted huge crowds, among whom he healed the sick and raised the dead using spirit possession, quoting from the Bible, and shouting, "Be healed in the name of Jesus Christ" (Anstey 1966, 125). Eyewitnesses reported that he "tossed his head, rolled his eyes, and jumped into the air, while his body twitched all over" (Andersson 1958, 58).

Stories of Kimbangu reveal the nature of his healing. Many observers saw no miraculous events (Andersson 1958; and see Janzen and MacGaffey 1974, 62, for a skeptical example case involving a later prophet). Yet Andersson (1958) provides eight healing stories illustrating why people were attracted to this, and later, movements. These accounts reveal patterns found in spiritual healing all over the world, both ancient and modern (McClenon 2002a, 2002b). Ritual performances contain hypnotic inductions, generating hypnotic and placebo benefits. Those most often healed complained of disorders with a psychological basis, of the same types amenable to treatment by hypnosis. Many of the blind, paralyzed, and deaf probably suffered from conversion, anxiety, and dissociation disorders—problems prevalent in societies exposed to severe stress. Recurring elements in miracle healing stories, such as temporary reduction of symptoms and differential response to suggestion, infer hypnotic processes. For example, a respondent described bringing two blind men to Kimbangu for healing. He noted that one did not benefit. The second man, Yankala,

> rose at once at the prophet's command and started in route for his home. When they met him later in a village on the way he gaily answered their queries as to whether he could see, replying "When we came here before, I could not walk, and you carried me, now I see clearly and can walk by myself." (Andersson 1958, 55)

The narrator reported that Yankala had been commanded by Kimbangu not to sin again, but when Yankala resumed drinking alcohol, his blindness returned. This type of reversion is found among all large collections of miracle healing stories—even on the ancient Greek stone steles of Asclepius at Epidaurus (McClenon 2002b, 41–43).

Example cases also illustrate direct evolutionary impacts of spiritual healing. As in all societies, Kongo healers facilitated conception:

> [Babutunu Jean] had two wives, both of whom deserted him, because of his sterility, and now his third was about to follow the example of her predecessors, for the same reason. When Babutunu Jean came to the prophet he said: "I am sterile. I wish to beget children." Kimbangu merely replied: "Beget children, in the name of Jesus Christ." Within a few days of his return his wife became pregnant. The child was a boy. (Andersson 1958, 55)

Given the strong links between human sexuality and psychology, it seems likely that ritual processes selected for specific genotypes since some people derive greater benefits than others.

The Belgian administration, concerned with the possibility that the colonial regime would be overthrown, sought Kimbangu's arrest, and in September 1921, obedient to a message from God, he gave himself up. He was whipped and sentenced to death—a sentence later commuted to life imprisonment. Kimbanguists were forced to worship in secret, and Kimbangu died in prison in 1951, after 30 years of incarceration. "Despite Kimbangu's imprisonment, his movement flourished as huge congregations of true believers, many of them sick, came together to enter hypnotic trances. . . . New prophets arose to continue Kimbangu's mission, becoming possessed, speaking in tongues, and finding their health restored" (Edgerton 2002, 174). Andersson (1958, 136) describes later prophetic movements, noting their success in curing sterility, a problem of great importance among the BaKongo.

In 1957, the Kimbanguists began a campaign of passive resistance, and on the eve of national independence, in 1959, the Church of Jesus Christ on Earth through the Prophet Simon Kimbangu was legally recognized by the government. Spiritual healing continued to be an important activity:

> In Kimbanguist theology, Kimbangu's success as healer guarantees the promise of salvation. In June 1960, the newspaper *Kimbanguisme* reported that 10,050 persons had been healed in the preceding two months: 4 people rose from the dead; 4,789 lame persons walked; 3,568 of the blind saw, and 902 lepers were cleansed. (MacGaffey 1983, 118)

MacGaffey (1983, 186) portrays Kimbangu as equivalent, in many respects, to traditional magical healers. His analysis describes how Kimbanguists constructed new ideologies from existing concepts; innovative ideas were framed within the basic Kongo paradigm. Kimbanguism had political aspects, becoming aligned with anticolonial ideologies. In this case, the ideology unified its members, providing a form of social glue; this evidence points to social processes within religion that must be included in evolutionary explanations. Group selection and ritual healing are not mutually exclusive.

Modern Kimbanguism, one of many Kongo prophetic religions, has over a million members. Its history illustrates how religion works, and this example implies that group selection processes occur, to some degree, since Kimbanguists benefited from membership. Yet this history more directly supports the ritual healing theory. Kimbangu's biography fits the shamanic pattern. He reported visions and other anomalous experiences. His performances attracted followers through creating stories of miraculous healings. People with dissociative propensities had greater probability of benefiting from this movement.

Modern Kongo Prophets

After independence in 1960, political repression of innovative religions declined. Numerous prophets arose, established churches, and introduced new religious concepts. MacGaffey (1983, 5) portrays how "successive generations of prophets offered different social analyses and recommendations, all framed in the same set of categories, the ideological structure of Kongo religion." As would be predicted by the ritual healing theory, the Kongo ideological structure reflects, in part, the physiological basis for religion. Prophets describe anomalous experiences, supporting belief in spirits, souls, life after death, and magical abilities—with witchcraft beliefs prevalent. They provide hypnotic and placebo benefits to those more open to suggestion. Although specifics vary over time, recurring elements are translated from one era to the next.

Prophets' revelations typically take the form of a spiritual journey, coinciding with shamanic visions. For example, a prophet reports,

> In 1966, I fell into a coma, and people brought blankets for my funeral; but then I saw a bright, dazzling light, heard a heavenly choir singing No. 461 [\"Many troubles here on earth, we suffer from sicknesses, our tears pour down O Spirit, come to help us!"], and I awoke to find that I had acquired exceptional intelligence, so that no witch could get past me. (MacGaffey 1983, 211)

This story exemplifies a near-death experience. Near-death experiences often include perceptions of leaving one's body, traveling to a spiritual realm, and gaining information about life after death during a life-threatening event.

Content analyses of near-death experience collections reveal their equivalence to shamanic visions. Fox (2003, 247) analyzed 91 British accounts, classifying crisis experiences, in which the event involved the possibility of death (near-death experience), and noncrisis experiences, in which that possibility was not present (visionary experience). Comparing the two groups, he found virtually equivalent frequency of Moody's "core near-death experience features" (Fox 2003, 247). McClenon (2005a, 2006a) conducted parallel

analyses of 28 near-death experience accounts collected in North Carolina, United States. He also found equivalent frequencies of near-death experience elements within crisis and noncrisis accounts. The Kongo literature provides two visionary narratives and five near-death experience accounts. Visionary narratives and near-death experience accounts contain equivalent near-death experience core features. These findings imply that near-death experiences are not generated by mechanisms related to a dying brain, but through visionary processes. This is not to say that near-death experiences are invalid, but that they are equivalent to visions, something recognized within spiritual traditions. Shamans, prophets, and dying people are thought able to visit spiritual realms. Using a social scientific paradigm, the data imply that humans, during unusual cognitive states, have a propensity to perceive cognitions contributing to belief in life after death.

CONTENT ANALYSIS OF KONGO EXPERIENTIAL ACCOUNTS

Table 11.1 compares 56 Kongo anomalous experience accounts to 1,578 cases collected in North Carolina (McClenon 2000, 2002a, 2002b) and 40 cases reported by professional anthropologists (McClenon and Nooney 2002). Kongo cases were found in texts pertaining to religious history (Andersson 1958; Bockie 1993; de Vesme 1931; Janzen 1978; Janzen and MacGaffey 1974; Laman 1962; MacGaffey 1983; McClenon 2006c, Thornton 1998). The coding system for classifying these accounts was tested for reliability using multiple judges over various studies (McClenon 2000, 2002a, 2002b; McClenon and Nooney 2002). Experiential forms included apparitions, waking extrasensory perception, spiritual healing, paranormal dreams, normal dreams, occult events, psychokinesis/poltergeists (unexplained movement of objects), and near-death experience/out-of-body experiences. Previous anomalous experience collections gathered in Great Britain, the United States, Germany, Finland, and Hong Kong were compared to these data sets (McClenon 1994, 2002a). Although incidence of reports varies among societies, much evidence indicates that these forms have universal features, implying a physiological basis.

Variations in frequencies of reporting of experiential forms might be attributed to a number of factors. Cultural differences probably contribute to variations in reporting. Different methods of collection also affect frequencies. The North Carolina sample was gathered through college students conducting oral interviews of relatives, friends, and neighbors (McClenon 2000, 2002a, 2002b). The anthropological collection was created by assembling accounts published in the literature by anthropologists describing field experiences (McClenon and Nooney 2002). Previous cross-cultural comparisons

Table 11.1 Distribution of Anomalous Narrative Type within Collections

	North Carolina (N = 1,578)		Anthropologists (N = 40)		Kongo (N = 56)	
	No.	%	No.	%	No.	%
Apparition	642	40.7	13	32.5	11	19.6
Waking ESP	80	5.1	9	22.5	2	3.6
Spiritual healing	114	7.2	10	25	15	26.8
Paranormal dreams	175	1.1	4	10.0	3	5.4
Normal dreams	79	5.0	0	0	3	5.4
Occult events	43	2.7	2	5.0	5	8.9
Psychokinosis/poltergeist	169	10.7	1	2.5	8	14.3
NDE/OBE	30	1.9	0	0	7	12.5
Other	246	15.6	1	0	2	3.6
	1,578	100	40	100	56	100

Note: ESP, extrasensory perception; NDE, near-death experience; OBE, out-of-body experience.

reveal variations in frequencies among cultures, with all cultures providing similar experiential forms (McClenon 2002b).

As predicted by the ritual healing theory, most Kongo anomalous accounts have the same forms as those reported in other societies. MacGaffey's (1983) text on Kongo prophets includes a near-death experience, two spiritual healings, and an occult performance (a rain-making prayer). Janzen and MacGaffey's (1974) translation of Kongo religious texts includes five healing accounts (dating from Kimbangu to modern prophets). Laman (1962), a missionary in the Congo between 1891–1919, provides 19 anomalous experience narratives: 7 apparitions, 7 haunting/poltergeists, 3 occult performance accounts, and 2 anomalous animal accounts. Andersson's (1958) discussion of Kimbanguism and later prophetic movements includes eight spiritual healings, one extrasensory perception account, and two occult performances (fire immunity feats). Bockie (1993) describes three apparitions, two paranormal dreams, three normal dreams (considered extraordinary), and three near-death experiences. De Vesme (1931) provides a psychokinesis/poltergeist account attributed to Central Africa, included even though the witness does not mention a specific ethnic group.

Respondents often describe their experiences as compelling belief and argue that miraculous effects can be verified empirically. For example, two

prophets describe healing experiments, in which they found that rituals resulted in healing, while failure to conduct the ritual resulted in deterioration of health (Janzen and MacGaffey 1974, 66, 67). Several speakers at a prophet conference in Leopoldville (Kinshasa) in 1961 maintained that "the government should conduct a test of candidates for the leadership of the new organization [of prophets], in which the winner would be the one who most successfully performed the required miracles" (MacGaffey 1983, 58, 59).

Biographies of Kongo healers often describe potential practitioners' sickness, healing, and resulting faith. This socialization pattern, observed by anthropologists all over the world, is termed the *wounded healer syndrome* (Halifax 1982). Faith healings inspire profound belief, enhancing the ritual performer's ability to inspire faith in others.

Surveys indicate that the experiential forms listed in table 11.1 are reported with surprising frequency in U.S. and European national surveys. Over half of U.S. respondents report at least one extrasensory perception episode (McClenon 1994). Of U.S. national survey respondents in 1990, 9 percent reported having seen or been in the presence of a ghost, and 14 percent said that they have been in a house they felt was haunted (Gallup and Newport 1991). Collections of narrative accounts from Finland, Germany, Great Britain, China, Japan, and the United States indicate that people from all these countries report similar forms of apparitions, waking extrasensory perception, paranormal dreams, psychokinesis, out-of-body experience, and synchronicity (McClenon 1994). Analyses of survey responses from Japan, China, Europe, and the United States reveal that all cultures contain many individuals reporting frequent experiences (McClenon 1994). Studies also indicate that waking extrasensory perceptions, paranormal dreams, and apparitions have inherent structural features, consistent among cultures (McClenon 2000). Waking extrasensory perception, for example, tends to pertain to present events, while paranormal dreams more often predict future events. All over the world, paranormal experiences are likely to pertain to family members and to death.

As with other collections, the Kongo literature contains culturally unique stories. Two BaKongo described anomalous animals, killed by local people and thought to have magical characteristics. Since most accounts coincide with universal experiences, the data, in general, support the argument that the major experiential forms have physiological bases (McClenon 2002b). Specific stories illustrate how anomalous experiences generate folk belief. Laman (1962) describes how apparitions and psychokinesis affect faith:

> One day, when Nambulu died, they dressed her in her skin with dog-bells that she had been wearing while dancing. At night, when the people were lying down, she went about with her skin and the bells all over the village. Everybody then understood that the dead live and that they go about in the same shape as they had on earth. (Laman 1962, 27)

This story illustrates how "everyone" came to believe in life after death, even though not everyone perceived the apparition. As with the horsemen in the sky story told by early Kongo Christians, the account's acceptance depends, in part, on listeners' acceptance of the storyteller's sincerity. Because people tend to know each other, telling the story sustains folk religious beliefs.

Many accounts contain elements designed to refute skeptical arguments: simultaneous experiences by multiple witnesses, status and honesty of witnesses, and witnesses' attempts to preclude normal explanations through investigation. Although scholarly discussions of such stories are restricted by academic norms, on the folk level, many reports have compelling qualities. Folklore implies that anyone could see a ghost, have a paranormal dream, or perceive spiritual effects—with some people having greater propensity than others. A unifying theme is that experience compels belief. For example, the missionary Karl Laman quotes an informant's extensive poltergeist experiences, in which the poltergeist is labeled as "that one." He concludes his account by describing his own investigation:

> Finally, the women got together, terrified, in one house. But that one came there and banged on it vehemently, so that in great fear all went out through the door. When that one came, it was like a rushing strong blast.
>
> As this took place in the village of Mukimbungu mission station, we called the whites to come and see and let us understand what it could be. Among these was taata Laman and two others.
>
> I, Laman, hereby confirm these phenomena. One evening we went down to have a look, and it was then that the terrified women gathered in a big grass house. While we went about there one of the long walls of the house was pounded with heavy blows, so that the house shook, so that maize etc. hung up in the house tumbled down. We had a lantern with us to investigate, but we saw nothing. It was, moreover, entirely out of the question that a human being should have been able to do it. The following day we tried to bang on the wall as hard as we could. But neither the sound of the blows nor the violence of them was anything like those of the previous evening. The owner of the house had earlier been out hunting and been gored to death by a buffalo, so everyone thought that it was his ghost. We tore down the brick house and built a store with the bricks, after which everything seems to have stopped. (Laman 1962, 25–26)

This account has the same structure as haunting/poltergeist narratives all over the world: speakers portray themselves as logical investigators, seek authorities to verify their authenticity, report attempts to preclude normal explanation, and infer occult explanations. As is common in such stories, an action, such as in this case, tearing down the house, affects the phenomenon's incidence. In parallel fashion, culturally prescribed rituals, exorcism, prayer, medium's communications, and so on, may reduce or eliminate unwanted effects, and as a result, the phenomenon, and associated rituals, seem verified empirically.

Certain people have a propensity for anomalous experience, and social factors are known to trigger this propensity. Social scientists have long noted relationships between deprivation and religious movements. Relationships between stress and visionary experience coincide with the psychotherapy literature. It is almost axiomatic within psychotherapy literature that dissociative processes have therapeutic qualities—the mind compartmentalizes traumatic memories, enhancing mental health. This system breaks down when conflicts are severe—abused children develop dissociative identity and posttraumatic stress disorders. In parallel fashion, visionary and anomalous experiences seem more prevalent during times of social trauma. MacGaffey (1983, 118) notes that prophets "come from the elements of the population that suffered most . . . from status discrimination" and that visions reflect "the contradictions of the society in which they lived" (MacGaffey 1983, 236). Dona Beatriz, Simon Kimbangu, and many modern prophets are example cases. Similar patterns exist all over the world. Surveys of Chinese college students, raised during the turmoil of the Cultural Revolution, revealed higher rates of anomalous experience (41% reported many experiences) than found among other groups (McClenon 1994, 30). Human physiology seems to have evolved in a manner that causes dissociative capacity to be switched on by childhood trauma.

CONCLUSIONS

Although Kongo history includes examples of the social functions of religion, it provides no case of a religious group replacing a less religious group. As a result, the Kongo history analysis grants little insight into how genes associated with social functions increased in prevalence, beyond the capacity for some groups to experience increased unity. Although group selection processes may be so subtle that historical analysis does not detect them, the lack of a single example case is surprising, given the prevalence of social scientific belief in this paradigm.

On the other hand, historical analysis supports the ritual healing theory. Kongo religious history portrays recurring cycles, noted all over the world. The literature provides many examples of social trauma seeming to contribute to the emergence of magical practitioners. Dissociative people experience anomalous perceptions and become healers using hypnotic and placebo processes. Cases derived from the history of indigenous Kongo religions, early Kongo Christianity, Dona Beatriz, Simon Kimbangu, and modern Kongo prophets reveal patterns implying dissociative and hypnotic processes. Kongo anomalous experiences coincide with categories found in societies all over the world, suggesting physiological bases. Audience members more open to suggestion gain greater benefits, illustrating a process that, over the millennia, selected for genotypes related to dissociation and religiosity. The ritual

healing theory argues that these patterns can be found through analysis of the history of any ethnic group.

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CHAPTER 12

Where Medicine Ends and the Miraculous Begins in Mysterious Healings

Myrna M. Pugh

At what point do we stop expecting modern medicine to do its job and start hoping and praying for a miracle? Is there a beginning or an ending to the question? Is it a valid question to begin with? It would seem that it is valid since it invites us to struggle with the question to form some conclusions. Questions that cause us to struggle and process ideas are helpful and beneficial to us. When we are brought to the place of intellectual and emotional testing and growth, it usually is a good thing. We are then able to come to conclusions that express our own selves. This is part of what we call *critical thinking*. This is important to developing our own unique identities.

The question of just when and where we start and stop understanding difficult concepts like medical miracles can stretch us greatly. It is not clear where the beginning or ending of the line between the two lies. Perhaps it is more of a continuum than an actual point. Since we are all on continuums of various sorts, emotionally, mentally, economically, spiritually, and physically, this might be a helpful way of looking at the whole idea. Circumstances will dictate where we put our boat into the stream of decision. It could be that there are no clear-cut indicators or guidelines, and we might need to leap into the unsettled waters of medical miracles during a time of crisis.

Some would point out that it is not possible to separate miracles from technology today, and they could be right. In the last 10 years, the field of medical technology has exploded with new and bold treatments and devices to deal with sickness and disease. One of the most important advances ever made by science has been the development of the Human Genome Project (Drell and Adamson 2000). The Human Genome Project is a by-product

of the discovery of the genetics code in the mid-1950s. For the first time, a magic doorway has opened, allowing us to see the basic units from which we are constructed. Science has used the intervening time wisely. In the last 50 years, more has been discovered about how the body works, or does not work, and how to understand the processes of disease, than in the entire previous span of human history.

The Human Genome Project began in 1990, and it has heavily influenced most fields of research and development since then. The importance of this project lies in the fact that the origin of all diseases and disorders is genetic. Genes determine all that we know of who we are as individuals and as a species. The mapping of the human genome has already uncovered many culprits in disease processes. Identification of defective genes is showing how specific diseases or certain conditions come about. Understanding this critical information ought to lead researchers to know how to test for specific genes such as those genetic anomalies that cause Huntington's disease, a fatal neurological disorder that kills slowly, but in a horrific manner. As a result of this genetic specificity, gene therapy, in the form of stem cell transplantation, may well be the answer to many chronic diseases such as diabetes or scleroderma, an autoimmune disorder of the connecting tissue and skin, with nearly always fatal consequences. Studies are under way to explore treatments for this rare disorder (Sullivan 2006).

Following hard on the heels of the Human Genome Project is the exciting field of organ transplantation. We would normally think of heart or kidney transplants when we consider this field, but it is much larger than that. Today, almost any organ in the human body can be, and has been, transplanted. Today, in some cases, multiple organs can be and now are transplanted, even into children. At the University of Pittsburg, Thomas Starzl has built what is arguably the largest transplant center in the world, the Thomas E. Starzl Transplantation Institute. The research and development of new procedures and new equipment is astounding. They have even built a children's hospital that specializes in nothing but transplantation for children (Children's Hospital of Pittsburgh 2007).

Some of the transplantation specialties are heart, lung, intestine, kidney, liver, pancreas, and bone marrow as well as bone, tendon, and cornea. A few of the multiple transplants consist of blood and marrow, heart and lung, or liver and intestine. In addition to human organ transplantation, much advancement has been made in the field of artificial heart devices, which either take over the work of the heart completely, while a human donor's heart is searched for, or allow the heart to rest, while it heals. Such a device is the Berlin heart, which has been designed to fit inside the smaller-sized bodies of children. This is still an experimental device that, when used in the United States, requires a single-use permit. Developed in Germany, it is expected that this device might become a standard in the future for children who need transplants.

Not only can we transplant human donor hearts as well as artificial hearts to prolong life, but now, through the use of stem cells, we can also transplant cells that will do the work of whatever organ needs them, as in the case of the myocardium. *Cellular cardiomyoplasty* is the name of the new process, and practitioners have high hope for its success. Clinical trials are promising, but they are also slow (Taylor 2003).

Within the field of organ transplantation, there is new research, not only about how to preserve donor organs for a longer time, but also about how to keep them healthier at the same time. Part of the answer to these questions is a new organ preservation solution that does both. This new solution works for livers, kidneys, and hearts and is less expensive than old solutions (Eghtesad 2003).

Some transplantation challenges of the future include, but are not limited to, zenotransplantation as well as developing an implantable artificial lung (DiSesa et al. 2002). *Zenotransplantation* refers to the process of implanting certain human genes into a recipient, such as a fetal pig, for example, which would then develop desirable human organs, such as an ear, or traits, such as overcoming rejection when implanted into a human body (White 2003). One of the major challenges in the field of zenotransplantation is taking on the job of trying to develop a transgenic pig that would yield a usable and profitable human lung (Davis et al. 1999). If a transgenic lung or an artificial implantable lung can be developed, it would serve in the same way the artificial heart now operates; that is, it would keep the patient alive long enough to obtain a suitable human lung transplant, according to Bartley P. Griffith (2003) of the University of Maryland in Baltimore.

This technology, advanced as it is, still does not begin to touch the tip of the iceberg of organ transplantation. The statistics are grim. The latest numbers send a poignant message. Today, there are 9,948 people on a transplant waiting list. The total number of transplants done in the United States through April 2007 was 9,217. The donor list through April 2007 was 4,662. The odds are not good that you would receive an organ if you needed one, regardless of where you went for treatment.

At an international symposium on the future of organ replacement, in 2003, Dr. David M. Briscoe put it into perspective. Briscoe stated, concerning the future of organ replacement (Medscape 2003), "Almost every advance in medicine leads to a greater need for organ replacement." According to Charles G. Orosz of Ohio State University Medical Center in Columbus (Medscape 2003), "Transplantation could be considered as an entity that has successfully survived its birth, grown impressively throughout its childhood, and now enters adolescence. It has the potential to be highly productive as an adult."

Another bright light in the technological heavens is the field of nanotechnology. This emerging field of research has to do with inserting into the

body very small machines. It holds a great deal of promise for the future. Nanotechnology is currently being developed in at least 75 different venues around the country. It will have the potential for changing the way medicine accesses hard-to-reach body parts and will have the capability of monitoring various processes, such as blood pressure, when cruising throughout the body. This technology is extremely small and can go through tight places previously inaccessible to larger instruments or medicines.

The U.S. Food and Drug Administration has already approved nanocapsules for endoscopic purposes. One just swallows a nanocapsule, and it takes a picture of your intestines. It is a great help in clinical diagnostics. One of the uses currently being developed for this technology is as a so-called lab on a stick. One would be able to get multiple results from dipping the nanobiochip in a measure of blood to get instant readings.

When we consider miracles and technology, nowhere has the dual concept merged as in the field of obstetrics, especially the exciting venue of multiple births. Here is where miracles and technology seem to be ideal for each other. Multiple births are not new. In Genesis 3:16 (NKJV), God told Eve, "I will greatly multiply your conception." According to the biblical record, one of the reasons that Pharaoh was so fearful of the Hebrew people was that they were so prolific (Exodus 1:10; NIV). He actually ordered the death of all male infants at birth because the mothers were having so many babies. He felt these boys would grow up into disgruntled young men, who might someday turn on him in time of war (Exodus 1:10). It is taught in Hebrew lore that each Hebrew woman might have had up to six babies at a time (Exodus Rabbah 2000, 258).

Today, we could call six babies at a time a miracle, and it is. Most multiple births today are the result of great advances in the field of genetics and obstetrics. Called *in vitro fertilization*, eggs and sperm are combined in a laboratory, then implanted in the mother and brought as close to term as possible. This sounds easy, but a tremendous amount of time, effort, and money goes into each pregnancy, and the technology needed to make it happen is amazing. Once the mother is pregnant, the technology kicks into high hear, trying to assess how many babies there are, how many will survive, what kind of defects, if any, they will develop, and how long the doctors can keep the babies inside the mother. Each step is fraught with danger, and the latest technology is necessary to bring these fragile little lives to term. While I was doing one of my clinical internships, I went through a very difficult pregnancy with a young client, who was pregnant with triplets, and I was able to see firsthand the complicated steps it took to deliver the little girls and keep them healthy.

Assuming there are anywhere from three to six babies inside the womb, they usually come anywhere from six months on. Rarely are these tiny babies carried to full term. When they are born, they are immediately transferred to

a specialized neonatal intensive care unit and are then hooked up to so many monitors and diagnostic devices that it is sometimes difficult to see where the babies are under all those wires and tubes. They have their eyes taped shut and catheters inserted into lungs, bladders, veins, arteries, and stomachs. They nearly always wear little heart monitors and breathing apparatus. It is not unusual for these tiny infants to weigh in at less than one pound each. Today, it is possible to keep most of these infants alive, then bring them up to birth weight and see those same infants thrive at home. Modern technology has allowed these living miracles to achieve, and even remake, history. In the case of in vitro fertilization, we have placed a high value on life, and nowhere does the concept that life is worth saving come into play as it does at the very beginning.

For all the wonderful advancements in medical technology and knowledge, there is a dark side. Some feel that the advances extract too high a price from the consuming public. Unrealistic expectations are the result of rapid and unremitting wonders. Today, everyone expects, and feels that they deserve, the newest medical marvels and innovations that might either save or prolong their lives, and certainly make it easier to live with their unique medical problems. According to Michael E. Chernow (1998), an economist who specializes in public health at the University of Michigan, new technology is responsible for the continuing rise in health care costs today. He says, "The reason why health care costs are higher now than they have been is because of new medical technology. It's not increased waste, it's not fraud, it's not increased law suits, it's not the fact that people on average are older, all of that may contribute, but the predominant factor relates to the development and utilization of new medical techniques, of which there are an enormous number" (Chernow 1998, 259–88).

Some physicians advocate controlling new technology as a means of containing health care costs. This includes rationing access to new or high-cost equipment, procedures, or technology. Other options include a nationalized health care system and changing the way medical progress is currently accessed. Some physicians feel that it is morally wrong to raise the hopes and expectations of patients that everything that can be done, actually should be done, to prolong life (Deyo and Patrick 2005). Part of the love affair of this country with the embrace of new technological advances is our great desire for instant gratification. We have bred into every generation since the end of World War II a sense of entitlement: baby boomers, in particular, want everything, and they want it now. Not ones to suffer unnecessarily, they demand the best the world has to offer, and they consume everything they can obtain from the resources they command. They expect the newest, the most complicated, and the most expensive health care in the world, and they are getting it. This preoccupation with beating the odds of dying was reflected in the comments of L. M. Fisher of Human Genome Sciences, when he quipped,

"Death is a series of preventable diseases" (2000). However, C.S. Lewis said, "Death is total in every generation" (qtd. in Graham 1975, 71). It is true that we can postpone death, but we cannot hold it at bay indefinitely—at least, not at the present time, using today's technology. One cannot ignore the greed factor here. There are enormous profits linked to each medical advance. The marketplace of needs and preferences must and will dictate what miraculous innovations will emerge and survive into the future. The most prominent factor, however, driving the quest for more medical technology is the original and eminently worthy American spirit of intriguing inquiry into and the mastery of the unknown.

One might ask where all of this energy and creativity came from. What sets people apart in their ability to dream, create, and bring to fruition ideas and plans? This ability to conceive new ideas and carry them out is a product of humankind being created in the image of God. Theologians call this the *imago dei*, and it means that we are very much like God. We are not God, but we do possess a number of the characteristics of God. For example, God is inherently a creator, and we are creators as well. We do not create *ex nihilo*, like God did, but we take what has already been made and use it to make something else. We do this on a grand and nearly miraculous scale.

From pitchforks to space buggies, we dream, conceive, plan, design, and engineer all sorts of items that are beneficial to people. We also design instruments and items that are not beneficial, but actually harmful, to people. Our capabilities move in both directions in this regard. Sometimes our creative ideas go nowhere; at other times they accomplish great things. What does the *imago Dei* mean to us when we consider medical miracles? Where did this *imago Dei* come from? What does it consist of, and what purpose does it serve? Genesis 1:26 describes the creation of humankind. God said, "Let us make man in our image." Genesis 1:27 describes the action taken by God: "So God made man in his own image, in the image of God he created him." Genesis 2:7 reiterates the details of that creation: "The Lord God formed man [out of the dust of the ground *[adama]* and breathed into his nostrils the breath of life, and man] became a living being." It is clear that we are created in the image of God. This means that God made us with many of the same qualities that reflect who he is.

What are some of those important qualities we possess that are like God? For one thing, we are immortal beings. There are some important parts of us that will never really die, but will endure beyond our own demise. Just as God is a triune being, so, too, we are triune beings. We are composed of a physical part that is carbon based; a soul, made up of the mind, emotions, and the will; and a spiritual part. The physical part is what relates to our earthly life. We are embodied spirits, and the spirit and the soul must have a place to live. We provide a home for the soul and spirit with the body. It is the flesh, the human body, that will die, but the other parts of us will go on living. This

is somewhat like God, except he does not need a body, although Jesus had a body like ours when he was here on earth.

We are also like God in other ways. We are created with characteristics such as the ability to love ourselves, others, and God. We care for others, as God cares for us. We are able to respond to the needs of others and forgive them, even when we have been injured or wounded at the hand of others. We desire relationships above all else, and will do anything to have them, even if unhealthy relationships. We think, we make plans and carry them out, we grieve and mourn our losses. We honor our dead and show them respect by burying them. We use the gift of free will to make choices, both good and bad. These aspects of who we are as human beings are also like God.

The fruit of the spirit, described by the apostle Paul in his letter to the Galatians, namely, love, joy, patience, kindness, long-suffering, faithfulness, gentleness, and self-control, are all parts of the *imago Dei*. The spirit mentioned here is the Holy Spirit, who is God present to us in our day. These desirable qualities are some of the ways in which God shows the world who he is through us, although they are not the only ways.

Examining the complex issue of medical miracles and the implications for society, the believing communities, and individuals, we need to look at where miracles and healing come from. We have discussed the emerging role of modern technology and how it relates to our perception of miracles. We now turn our attention to the source of healing itself. Technology cannot, and does not, heal. There are no inherent healing properties within it. Technology merely assists in the healing process, which remains the sole realm of God. Healing takes place in the tissues, cells, and organs of the body. Life is such a nebulous and elusive thing: we cannot see it, feel it, or handle it. Where does life come from? We know where death comes from. Death is the cessation of life. Science has struggled with this concept of the origin of life for generations. Researchers have attempted to create life in the laboratory but have never succeeded Science can only take created elements and recombine them to manipulate them.

For a long time, researchers believed that life came from spontaneous generation. This is "the belief that living things can arise from non-living material" (DeWitt 2002). The scientific concept for this idea was known as *abiogenesis* and was accepted within the natural sciences, until Louis Pasteur disproved it (Demick 2000). Pasteur and his colleague Rudolf Virchow postulated the idea that life does not come from nonliving matter, but can only come from previous life. They called this concept the *law of biogenesis* (DeWitt 2002). According to Jason Lisle, who is an astrophysicist at the University of Colorado in Boulder writing on God and Natural Law (2006, 75), "There is one well-known law of life: the law of biogenesis. This law states simply that life always comes from life. This is what observational science tells us: organisms reproduce other organisms after their own kind. Histori-

cally, Louis Pasteur disproved one alleged case of spontaneous generation: he showed that life comes from previous life. Since then, we have seen that this law is universal, with no known exceptions." Virchow, who had held to the idea of abiogenesis for some time, abandoned the concept and joined Pasteur in the laboratory to prove the construct that life comes from life. He coined the phrase *omni cellules e cellules* (all cells come from other cells; Demick 2000).

How does the idea that life comes only from life affect miracles? The answer lies in the chain of life. Life has to have an origin, or a starting point, and a material and physical receptacle in which to reside. First, there is a source of life power; second, there is the actual life power itself; and third, there is a receptacle for the power of life to reside in. God is the source of that life power, Jesus Christ is the life power, and our bodies are the receptacles for that life power. Our premise is that life can only come from life, never from death or nonexistence. A corpse contains no life within and cannot sustain life. When host cells die due to disease, injury, or adverse conditions, they do not regenerate apart from the genetic code built into them. Miracles override this code and allow the power of life free access to cells, tissues, and organs. Healing at this level is under the direct control of God. When a miracle occurs, power flows from the divine source into the smallest units of life, restoring and energizing them. Damage to, or death of, the cells can be repaired or reversed, and many times, any disease processes that are in place are actually replaced by new and healthy cells. This explains the longevity of medical miracles.

While surgery, machinery, and medicines assist in the healing process, healing is dependent on cells receiving the life power itself from the divine source. This is true regardless of how high tech or low tech the treatments are. There is a connection deep within human beings that eagerly responds to this life source. It is as though something inside recognizes and instinctively answers to this gentle, but powerful, touch. The *imago Dei* in people responds to another part of itself. As the sunflower follows the rays of the sun for the power to bloom, so we, too, look to the healing life force of God to regenerate damage to our bodies through his healing caress.

The idea that humans carry the essence of God around with us is heart stopping. That part of us that was designed to be directly responsive to God is still present, although it is sometimes difficult to see. We do see it, to some extent, in the area of human creativity. Because we have this flame within, God listens to us and empowers us for living life well. God takes an interest in us and our activities. He is responsive to our needs. We can have a relationship with the God of the universe. God is in the business of redemption, and one of the things he wants to redeem about us is his own image, the *imago Dei*. It is this image within us that is important to the one who made it and freely gave it to us.

Miracles, whether they are modern medical miracles or any other kind, keep us connected to God. They are a point of contact. The *imago Dei* allows us to form complicated ideas and understand concepts such as miracles. How does the *imago Dei* help us form a worldview that includes the miraculous and the unexplained? How do we recognize when medicine reaches the end of itself and a miracle begins?

The characteristics that are reflected in benefits to others, those good qualities that distinguish humans from other created orders, have their roots in the character of God. Our worldview is shaped by what we know and believe about ourselves and others, including God. When we allow those qualities that make us like God to shape our ideas of who we are, we will be more open to ideas such as miracles than if we give God no place in our thoughts and behavior.

The *imago Dei* has generosity to others at its heart. This is the reason that nearly every advanced social and civil institution has reached its peak since the introduction of Christianity. Benevolence and caregiving are a result of taking Christianity around the world. Hospitals and modern medicine are reflections of those qualities that Christ demonstrated. Healing is second nature to God and to those who believe in God. This plows the ground and renders it fertile so that miracles can flourish. Because God cares for us, he performs miracles on our behalf. Because we love God and others, we, too, perform miracles on their behalf.

Jesus was well known for his healing powers in the New Testament, but his role as a healer goes back much further than that. The Old Testament literature was rich with references to the great physician, long before he appeared in the pages of the New Testament. In ancient history, God is reported to have appeared to people in his preincarnate form, called *theophanies*. This form is mentioned in a number of appearances, to Abraham (Genesis 12:1–2), Isaac (Genesis 26:2–4), and Jacob (Genesis 32:24–30). He is also involved in healing people. In Exodus 15:26, God is referred to as *Yahweh Rapha*, meaning "I am the Lord who heals you." It was said of Jesus, as God with us, that he is the one "who is and who was and who is to come" (Revelation 1:4), revealing his activity not only in the past, but in the present, and in the future as well. The psalmist lovingly proclaimed, "In the beginning you laid the foundations of the earth, and the heavens are the work of your hands" (Ps 102:25). He is also mentioned as being the sun of righteousness having "healing in its wings" (Mal 4:6), obviously a reference to his unique healing powers.

John, the beloved apostle, began his Gospel with the following description of Jesus: "Through Him all things were made that has been made. In Him was life, and that life was the light of men" (Jn 1:3). Certainly Jesus needs no introduction to his prolific healing ministry in the Gospels. Almost every page describes numerous miracles of healing that took place at his command.

Jesus is at once the source of the life power and the healer of all disease and conditions. Not only is God the source of miracles and the source of healing, but he is also the designer of the human body itself. He understands every function and operation of the human body. We are told that there is nothing in the universe, or on the earth, including humankind, that he himself did not design or make (John 1:3; Colossians 1:16–17).

Since God is not only the source of life itself, but the actual power as well, it is reasonable and true to say that no miracle has ever taken place with which he was not intimately involved. That there is a transaction that takes place when miracles occur is obvious. There is a transference of power from the source, Jesus, to the recipient cells, tissues, or organs, and nowhere is this transference principle more apparent than at the crucifixion of Christ.

At the time of the crucifixion, when the life left his body, a powerful surge of life energy emanated from his corpse, and it rippled through the cemetery ground itself for some distance. It actually caused an earthquake. Wherever this residual life force traveled within the cemetery, it contacted other dead bodies. These dead bodies received his life force and came to life, according to the Gospel narratives. They were catapulted from their graves by the force and went all over Jerusalem, telling people about Jesus. The drama is played out for us in Matthew 27:52: "The tombs broke open and the bodies of many holy people who had died were raised to life. They came out of the tombs, and after Jesus' resurrection they went into the holy city and appeared to many people."

This was the most powerful medical miracle ever to have taken place. There has been nothing like it since. Jesus contained the life force within himself, but it could not be constrained for long. When the life force left his dead body, many others benefited from the residual power. We rarely, if ever, hear this taught, but nevertheless, it is an important part of the crucifixion and resurrection story. We see, then, that all miracles are a flow of energy from God, through Jesus, to the receptor. Often this flow of energy is in the form of technology. Not that technology itself contains any life force, but it represents the gift of the genius of those who have developed their God-given gifts of intelligence and creativity. This is as much a part of miracles as the direct infusion of power we associate with the stories of miracles.

Looking at the issues regarding miracles and how they operate, and especially examining the role of Jesus in the details of life, power, and the healing of cells and tissue, we find that there are other, newer, and more long range issues that emerge. Today, it is not enough to understand the relationship between God, life, Jesus, and technology. We must examine some underlying issues that affect our participation in miraculous events. Perhaps the most important issue affecting medicine as we know it today, or even as we hope to experience it in the future, is the field of bioethics. Bioethics came about as a result of the Nuremberg war trials of the 1950s.

During World War II, many truly horrific medical and psychological experiments were arbitrarily performed by German physicians on helpless prisoners of war, mostly Jewish men and women as well as those who were considered mentally or physically defective or disabled. There was no regard for their health, lives, or consequences. The effort to correct this injustice was summed up in the doctrine of informed consent. It was believed that no person ought to be tested or experimented on without express consent. This fundamental premise of human rights soon gave way to deeper questions of ethical behavior in the practice of medicine.

Today, the field of bioethics dominates every area of medicine and psychology, including research and development. In every area, bioethics leads the way in deciding if a product, treatment, procedure, or technological advance will violate someone's morals, conscience, or religion. Each year, enormous amounts of money are spent by research and development companies to determine what is acceptable or not acceptable to the consuming public. In theory, the emerging guidelines and protocols are designed to safeguard the intents and desires of everyone.

However, in nearly every case where ethics of any given situation are concerned, the wishes of proponents or developers of technology, procedures, and practice have taken precedence over the wishes of the public at large. As a case in point, many people today feel that the practice of partial birth abortion ought to cease. Yet in almost every case where it comes before the court, each state's ban on the procedure has been struck down. The driving force behind this is, of course, money. The abortion industry is a growth industry with revenues in the billions of dollars.

Because the scientific development of new products is built on the foundation of ideas, needs, and creativity, that development is dependent on the flow of money to sustain it and bring those ideas to market. It costs the industry a great deal of money and time to bring a product to market, and the odds of that product being financially successful are not always good. Ethics often trail behind in the efforts to fund a project that has the potential to earn large profits for investors. This is evident in the area of genomics and the tremendous financial gains this field offers to those who have the vision for future developments.

We have looked at how medicine and technology have already changed the practice of obstetrics, especially in the area of *in vitro* fertilization. Consider this scenario: it is now possible to recover the ovaries of an unborn aborted female fetus and use them commercially. Someone can extract her eggs, fertilize them, implant them in a prospective mother, and bring that fetus to term. This child will be the product of a genetic mother who was dead before she was ever born. How will the field of ethics, which is still struggling with so many new ideas, handle this situation in the future? The need for healthy human eggs is in demand for a number of uses. Among these uses are the

fertilizing of the eggs, then using the fertilized eggs in stem cell research. Although the government has banned the use of aborted stem cells in research, there is no such ban in the private sector. Private laboratories are free to purchase as many eggs as they can find, at market prices.

It will also be possible to use the potential siblings of that same child for experimental purposes (Hyde and Setaro 2001). This is morally reprehensible to those who hold a pro-life perspective. This is only one of a multitude of issues that have resulted from rapid advances in the sciences. Other questions arise: What happens to the rest of the fertilized embryos that remain from the in vitro process? Most of them are in a freezer somewhere, in limbo. A number of these frozen embryos have become the focal point for lawsuits, disputes, and hard feelings. This is an ethical dilemma for many people. Genetic engineering is an up-and-coming field of research. We can now test for many genetic abnormalities and defects. If something untoward comes along in an embryo today, we can simply dispose of it and use another one.

Organ transplantation is another fertile field of ethical dispute. Conflict sometimes arises over just when the donor is pronounced dead. Some organ recovery teams anxiously wait over a immediately terminal person, counting the seconds until the person is pronounced dead, as the window of time is critical in recovering organs for transplantation. Legal issues can either speed up or reduce the time in which an organ can be recovered from the donor and then be safely transplanted into someone else. This places prospective organ donor recipients in a difficult situation as well as those who are on standby to assist in the recovery and critical transplantation efforts.

My family faced this dilemma when my cousin was scheduled for a kidney transplant. It was 12 hours over the recommended time limit when he finally received the new kidney. The kidney proved to be nonviable and died. As a result, he went through several surgeries and severe complications, which caused him to die far earlier than was expected. He was unable to obtain another kidney.

Some of the implications of informed consent with regard to genetic testing and the huge conflicts that are expected to arise in this emerging field loom large for the future. Does consent imply ownership in some way, especially when there is the potential for money to be involved? This is a problem with egg donors and recipients. What will be the final determination of the legal and moral issues that may arise as a result of all the knowledge that is already on the scene, and what will surely come from genetic testing? Privacy issues come quickly to mind. Who should profit from the research already going on? Would clinical test subjects be able to profit from their own problems?

Today, we are shadowed through every medical treatment or procedure via the Health Insurance Portability and Accountability Act of 1996. This is supposed to grant us privacy against having our personal medical

information used against us in any way. It is interesting to note that the same documents that protect our privacy also provide for our personal medical information to be shared by the medical community for their express benefit. It is likely that legal, ethical, and moral issues will continue to emerge and will seek answers in every aspect of medicine as well as impact how science and individuals look at and understand miracles—and indeed, it should. One of those issues has to do with the competing rights of the individual to have all the information he or she needs or wants about what his or her options are for treatment, and the need to sign necessary consent for that treatment. These are two opposite issues, and they come together regularly (Drell and Adamson 2000).

Fortunately, agencies such as the U.S. Department of Energy and the National Institutes of Health (n.d.), which jointly govern the entire Human Genome Project, have included in their budget a substantial amount of money to fund various programs that relate to these issues. They have established a division called Ethical, Social, and Legal Issues (ESLI), which deals with ethical, social, and legal issues.

It is projected that within the next 20 years or so, your medical records will contain all of your DNA codes (Drell and Adamson 2000). This is good news and bad news. The good news is that health care professionals will have access to your entire genetic makeup and will be able to design drugs and techniques that will help you much better than they can do today. The bad news is that it raises huge privacy issues that might affect your job, credit, or even your marriage value. As with every issue, there is always an upside and a downside.

In the future, we will have to learn how to cope with our considerable privacy losses as well as learn how to profit from the benefits of this brave new world of information. Our children and grandchildren will no doubt handle these issues much easier that their parents and grandparents. After all, they have grown up in the computer generation and have already proven themselves to be information-adaptable.

The future is exciting. Miracles will continue to happen, when they are necessary. God will give up none of his power to the mere machinery of modern medicine, advanced technology, or scientific knowledge, but will continue to work his miracles through them and over and above them. In fact, these good things come about because of God's desire to give us and reveal to us important parts of who he is. Behind every forward step in science, God is there, applauding and urging us onward—but he will not be limited by our progress. The force of the miraculous is a vast reservoir out there beyond our best achievements. History will be rewritten again and again in the next 20 years, and it will look very different beyond that. This is neither good nor bad; it is simply what it is. We rightly call it progress.

We, as human beings, are a work still in progress. Miracles are a part of that progress. We have come a long way on our journey to maturity as a

species, but there is still a long way to go. We need the guidance and presence of God to make the journey, both as individuals and as a society. God clearly wants to accompany us on this journey. It is, after all, a process. The best miracle is that we are still here and jogging forward. God is with us! Life is a process. God is in the process. Therefore, we can trust the process.

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CHAPTER 13

Faith: An Existential, Phenomenological, and Biblical Integration

Philip Brownell

When I was a child, every week, on television, people broadcasted a religious meeting, a so-called healing service conducted by Oral Roberts. It was so vivid, startling, and compelling. It was on a black-and-white television screen. Oral Roberts was up on a stage, in the center of it, but in front of the stage, there was a ramp leading up to him from one side and leading down and away from him on the other. As Roberts preached loudly about God, crippled people on crutches and those in wheelchairs approached the stage. He leaned down, put his hands on them, and yelled authoritatively, "Be healed!" Then they stood up or stood alone, having thrown down their crutches, and walked away. The audience, meanwhile, wept, moaned, and waved their hands.

In later years, as an adult working in ministry, I occasionally watched on color television programs in which people were once more yelling and weeping, waving their hands, and all the while focused on healing. The makeup seemed more vibrant. This time, people were also being "slain" in the Spirit and falling down uncontrollably. The ministers made fantastic claims, including that they had raised the dead. Once again, I was amazed and baffled; however, by that time, I had some theological armor and immediately began to pass judgment on what I was seeing.

I have never found a satisfying answer to the experience of the miraculous as seen in such Christian media. In the face of that, I have wondered about Jesus's statements (Mk 5:34; Mt 21:21; Lk 17:19, 18:42)[1] that it is faith that opens the door to miracles, and it is a lack of faith keeping that door closed (Mt 13:53–58; cf. Mk 6:1–6). If faith is the door through which so much opens up in life, it seems fitting to explore faith in its own right, and not simply as a means to an end.

What is faith? Are there differing kinds of faith? Is faith just a religious construct? Early in the twentieth century, psychology conceived of a continuum between belief and certainty, all built on the objective evidence that either did, or did not, compel one to believe. At one end of this continuum, a person had enough objective reason to assert with reservations something as fact. At the other end was the superlative sense of belief taken to its utmost and resolved in certainty. However, altogether different was faith, conceived as a subjective attitude that did not consider objective evidence observed, but supplied whatever was needed to set uncertainty aside in favor of cognitive certitude (Ward 1920). Thus faith has been denigrated and suspect. It has been compartmentalized and marginalized as not belonging to the enterprise of normal and pragmatic living, let alone the naturalistic process known as science.

What follows is an existential, phenomenological, and biblical exploration of faith. Although existentialism and phenomenology overlap somewhat in mid-twentieth-century psychological literature (Maslow 1962; Sonneman 1954; May, Angel, and Ellenberger 1958; Pervin 1960), some of their relative features will be considered separately for the sake of clarity. This is not an exhaustive exploration, as that would take an entire volume or more. It is more of an integrative look at faith, using these various perspectives to create a more robust comprehension of some of the factors involved. As will be seen, that integration comes together tangibly in the clinical use of contemporary gestalt theory of psychotherapy.

AN EXISTENTIAL PERSPECTIVE ON FAITH

Some people consider existentialism to be more of an antiphilosophy (Dreyfus 2006) than a coherent philosophical system of its own. As such, it is seen as a rebellion against the prevailing, and stifling, philosophical systems of the times in which it arose. Others maintain that existentialism is simply a very practical way of doing philosophy and is as old as philosophy itself (Flynn 2006). Søren Kierkegaard is the prototypical existentialist, and he marks the start of existentialism. While there are precursors to Kierkegaard in Pascal (Dreyfus 2006) and Schleiermacher (Crouter 2005), it is Kierkegaard's work that strongly identifies the paramount concern in existentialism: the individual, Gerkin's *living human document.*

Kierkegaard lived in a time similar in some ways to our own. He objected to a prevailing contempt for the individual. He observed a search for science and objectivity motivated by Kant and Hegel, but in place of that, Kierkegaard substituted subjective truth, choice, and passion, and he turned attention back to the individual, away from the idea of the collective (Solomon 2004). His ground was his own Christianity and his rejection of Hegel and the church as burdens imposed on free people. He lived as an *existing*

individual, and he propagated both the concept and the lived experience of *existence* in a way that directly influenced Brentano, Husserl, Heidegger, Sartre, and Jaspers. With this pervasive influence, his thought became the ground and wellspring for European existentialism (Gaffney 2006).

Faith, for Kierkegaard, was the most important work to be achieved in a person because only on the basis of faith can one become a True Self (McDonald 2006). Being a True Self, furthermore, means being true to oneself; thus authenticity and so-called bad faith (see subsequent discussion) were linked with choice and responsibility. For existentialist thinkers, a person is free, and that has tremendous bearing on existence, which can be understood as the individual-in-situation. What does *individual-in-situation* actually mean? It is a field-theoretical construct, for freedom and choice are experienced as a function of the person in contact with whatever is other in various spheres of interpenetrating influence. Self emerges from such interaction (Philippson 2003). As such,

> there is no unique "core" to the individual. There is a person, who actively chooses, but he or she chooses among alternatives that are shaped by social processes in which he or she is an active participant. In making these choices, he or she defines a self that is specific to that situation. (Richert 2002, 82)

Thus both human behavior and one's identity can only be understood through such concrete circumstances of living. Since all living requires an environmental setting in which contact, the interaction between the person and his or her contexts, takes place, existential faith is the mechanism supporting identification with self-experience, freedom, choice, responsibility, and authenticity (Crocker, forthcoming) in the risky navigating of one's physical and interpersonal contexts. All this is wrapped up in the concept of an individual-in-situation, or *existence*. As Kurt Goldstein (1963, 201) told the assembled Harvard students during the 1938–1939 William James lectures:

> Our observation of our patients shows that they cannot actualize themselves without respect to their surroundings in some degree, especially to other persons. The sick man is exposed to catastrophic reactions to a higher degree than the normal man; he can perform only if he finds a milieu which allows him to avoid catastrophic reactions. This implies that his behavior has to presume definite environmental conditions, in particular the existence of other men. The patient must develop an adjustment to others and limit himself according to the social actuality of others.

With this understanding, one is ready to consider the affirmation of the freedom of the individual. Paul Tillich claimed that a person is free in the sense of being able to determine himself or herself through decisions that

reside at the core of that person's being (Pervin 1960; Salzberg 2002). In dealing with doubt, for instance, he asserted that doubt is not overcome by merely repressing it, but by the courage that does not deny doubt, taking doubt "into itself as an expression of its own finitude" (Tillich 1957, 101) and affirming the content of an ultimate concern:

> The offering of one's heart happens in stages, with shadings of hesitation and bursts of freedom. Faith evolves from the first intoxicating blush of bright faith to a faith that is verified through our doubting, questioning, and sincere effort to see the truth for ourselves. Bright faith steeps us in a sense of possibility; verified faith confirms our ability to make that possibility real. Then, as we come to deeply know the underlying truths of who we are and what our lives are about, abiding faith, or unwavering faith as it is traditionally called, arises. (Salzberg 2002, 153)

This becomes a practical aspect of living in a world filled with ambiguity and uncertainty (Guinness 1976; Taylor 1992). Thus faith—the affirmation in question—is also an existential decision completed in some kind of action. Kierkegaard (1954, 31–37) expressed that when he wrote,

> Each became great in proportion to his *expectation.* One became great by expecting the possible, another by expecting the eternal, but he who expected the impossible became greater than all. . . . By faith Abraham went out from the land of his fathers and became a sojourner in the land of promise. . . . He will never forget that thou hadst need of a hundred years to obtain a son of old age against expectation, that thou didst have to draw the knife before retaining Isaac; he will never forget that in a hundred and thirty years thou didst not get further than to faith.

Authenticity and Bad Faith

"Authenticity involves a radical openness to the world, to others, and to one's own experience; it involves honest and direct confrontation with the givens of existence toward the end of living in conscious harmony with them" (Walsh and MacElwain 2002, 257). Thus Abraham, Kierkegaard's exemplar of faith, chose against the moral absolute, suspending the ethical to follow his faith in God. Abraham's motives were "opaque to any outside observer" (Carman 2006, 231), and his behavior defied reasonable ethical interpretation. It is this radically individual and subjective faith that transcends external ethical commandments and standards, demanding that, come what may, a person must be congruent with himself or herself.

Authenticity is a matter of living the truth about oneself, which presupposes that a person actually knows oneself. People have wondered for centuries if there might be a self inside us somewhere that can be discovered. The classic statement of the midlife crisis is, "I've got to find myself," but where can one find that? There is no outward trip, no spa, no guru outside

oneself that can lead the way; rather, it's a matter of settling down into the daily process of experiencing, in which one finds such things as attraction or revulsion, interest or boredom.

My wife and I have very different appreciations of color and style. When we first got married, she liked to shop for me, and she would bring home shirts, pants, and shoes. The experience was disappointing for her because I did not appreciate the look and the feel of those clothes; so she ended up bringing back most of what she bought. One might say, "How rude. Why didn't you just go along with it?"

The answer is because those things had the feel of "not me." As my therapist once said, "It is one thing not to do what you want, but it is another thing not to even know what you want." Knowing oneself is a matter of ego. The Greek word for "I" is *ego*, and the strength of a person's ego is not really just a matter of excessive self-importance. Karl Jaspers stated that ego strength was composed of ego-vitality (awareness of existence), ego-activity (awareness of one's own performance), ego-consistency (unity of the self), ego-demarcation (self as distinct from the outside world), and ego-identity (identity of the self). A lack in ego-performance, for instance, results in disturbances of self-regulation, self-determined acting, feeling, thinking, and perceiving, while lack of self-identity results in weakening of the subjective gestalt (Kircher and David 2003). Perls, Herfferline, and Goodman (1951, 379–80) described the ego as the system of identifications that takes deliberate sensory-motor action as if isolated from its situation:

> Organic need is restricted to the goal, perception is controlled, and the environment is not contacted as the pole of one's existence but is held at a distance as "external world," to which oneself is an extrinsic agent. What is felt as close is the unity of goal, orientation, meaning, control, etc., and this is precisely the actor itself, the ego.

Had I merely smiled and thanked my wife for purchasing clothes that had the feel of "not me," all the while wondering what I was going to do with them, then I would have been acting out of bad faith. To act in bad faith is to avoid the risk that faith requires, for faith always comes as the bridge across uncertainty (Taylor 1992), and often, the anxiety of any given situation comes from the uncertainty over what might happen to oneself if one is authentic at any given moment. To remain true to oneself, to speak and act on one's truth, is to manifest good faith, but to pull back, interrupting contact as an authentic, existing self, is to display bad faith. Thus Emily Dickinson remained true to herself, acted in good faith, and rejected God, writing (see Lockerbie 1998, 34–35),

> Those—dying then
> Knew where they went—
> They went to God's Right Hand—

That Hand is amputated now
And God cannot be found—
The Abdication of Belief
Makes Behavior small—
Better an ignus fatuus
Than no illumine at all.

Choice and Responsibility

What comes linked intrinsically to the issues of authenticity and bad faith are those of choice and responsibility. That is because the existentialist emphasis on the individual requires a consideration of such concepts as autonomy, responsibility, choice, self-creation, and self-identity (Maslow 1962). Existential psychotherapists and writers, for instance, have stressed the importance of "the client's free choice as essential to both the process and the outcome of psychotherapy. These traditions have rooted this process of choice in a well-articulated, highly individualized concept of self" (Richert 2002, 77).

While embracing these elements in an understanding of faith, one must keep in mind that such an individual exercises choice and experiences responsibility for such choice as properties of an emergent self, and the emergent self exerts a downward, causal influence over the brain, as the entire person is stimulated through contact in the environment (Murphy 1998; Gregersen 2000). The mind, the soul, and the self are constructs that overlap and point to the same thing, a dimension of human experience that "arises out of *personal relatedness*" (W.S. Brown 1998, 100). Thus to say that a person is an individual, and that the self is autonomous in making such choices, does not contradict assertions that people come into existence through relationship, are never actually apart from some kind of relation with others, are never set apart from the field in which they live, and are not able to thrive without it (Wheeler 2002; McConville 2001). Existential faith involves as much trust in oneself, something unseen and only experienced through contact and relationship with others, as in anything.

According to Kierkegaard, God places human beings in situations in which choices cannot be made rationally using moral categories and logic. These choices must be navigated without such criteria, and they are "essential to the life of faith. This is the brutal situation of human life and draws our attention to the fundamental character of decision: one's very soul depends upon it" (Wildman and Brothers 2002, 362).

Since no individual is truly alone, such choices are always made with a measure of accountability to others, and this is known as *responsibility:* "The speech of the other provokes a response in me and my *response* is at the same time my *responsibility*" (Moran 2000, 349).

Philip Yancey (2003) described the life of prisoners of war who had to work on the Burma-Siam railway during the Second World War. That was the group about which the movie *The Bridge on the River Kwai* had been made.

Yancey described how the men had started out stealing from one another, fending just for themselves, and how life had become gruesome, until one day, a guard was about to shoot someone because the group would not divulge who had stolen a shovel. That's when the speech of that guard, and the need of that other prisoner, prompted a different kind of response. One of the men stepped forward to confess having taken the shovel, and he was brutally beaten to death. Later that day, it became apparent that the shovel had never been stolen at all. His response, and the burden of responsibility that he took on himself, cost him his life. From that day forward, the character of the camp changed, and people began to look after one another. They nursed the sick and infirm, and they shared with one another their strengths and resources. The actions of that one man became a powerful speech that could not be forgotten; it demanded a response that was more than just skimming over the superficialities of life; it called forth accountability and responsibility.

People speak in one form or another. It could be about something big or something small. It's obvious sometimes, but other times, it's like they are speaking to someone else, or not really speaking at all. It's possible to skim past them, as if they were a rack of unwanted clothes, but they really are not. If one sees them, if one hears them, then they have spoken to those who have perceived it. It is as if they called out, "I am here." And the response to that is at once a responsibility:

> "I am here," said the homeless person.
> "I am here," said the abused child in a family too ashamed to tell the nasty secret.
> "I am here," said the neglected wife of an alcoholic.
> "I am here."

A second meaning in the concept of responsibility denotes the subject whose experience it is. If, for instance, something is my experience, then it is not someone else's fault. I own it. I take responsibility for my own experience, and I do not externalize it by blaming others. Thus responsibility can also be seen as a form of authenticity.

A PHENOMENOLOGICAL PERSPECTIVE ON FAITH

Faith is an experience, a part of living, and a phenomenon. In so-called biblical faith, one has the proof of things hoped for and the conviction of things unseen; that is, a person is presented with a concept, a potential, or a precept, and the fullness of it, the reality of it—the *Presence* of it—is experienced in the absence of the physical perception or appropriation of the object of faith in question. As such, faith becomes the principle by which *noemata* (the *intentional* objects of one's phenomenology) are experienced *phenomenologically.*

What is it like to experience faith? For that matter, what is it like to experience anything? Personal experience is the realm of phenomenology and has been explored more fully in volume 3, chapter 11. What remains is to examine various typologies of faith and the phenomenology of perceptual faith.

Typologies in the Phenomenology of Faith

There are many ways to conceptualize faith—what it is and how it plays out in the lives of people. Before considering two elements in phenomenology (intentionality and perception) that bear directly on faith, it is helpful to take note of several important typologies of faith. They overlap one another somewhat, but another way of understanding that is to admit that there are some commonalities involved.

Paul Tillich suggested two different types of faith: ontological and moral. *Ontological faith* calls forth a response to encounter with God, and *moral faith* calls for obedience to the laws and precepts present in God's standards.

Every individual is the "bearer of a special experience and content of faith. The subjective state of the faithful changes in correlation to the change in the symbols of faith" (Tillich 1957, 55). Ontological and moral faith each make demands of absolute truth on the limits of a relative existence. Symbols of faith are those elements of reality that serve to point toward the transcendent value of what Tillich called the *ultimate*.

To understand ontological faith, one must first understand the idea of the holy (Otto 1958). It is mysterious, daunting, and full of awe. It is also irresistibly fascinating, and so there are two aspects of the numinous experience of the holy: a fear that causes dread and makes the hair stand up *(tremendum)*, and attraction that draws one toward it *(fascinans)*. "It is the first element which impresses upon us the holy 'apartness' of God, His greatness and His glory, His might and His majesty, so that we bow down before His presence and humble ourselves" (Martin 1974, 14). This is what happened for Moses as he drew near to the burning bush. This is Isaiah's experience of the vision of God in Isaiah 6:5. This is John's attitude during the revelation on Patmos. The experience of the holy is what calls forth a response of faithful worship.

It invades the mind mightily in Christian worship with the words,

> Holy, holy, holy.

It breaks forth from the hymn of Tersteegen:

> God Himself is present:
> Heart, be still before Him:
> Prostrate inwardly adore Him.
> The "shudder" has here lost its crazy and bewildering note, but not the ineffable something that holds the mind. It has become a mystical awe,

> and sets free as its accompaniment, reflected in self-consciousness, that "creature-feeling" that has already been described as the feeling of personal nothingness and submergence before the awe-inspiring object directly experienced. (Otto 1958, 17)

Tillich (1957, 58–59) described the way the holy is perceived and operational in the community of faith as follows:

> The holy is first of all experienced as present. It is here and now, and this means it encounters us in a thing, in a person, in an event. Faith sees us in a concrete piece of reality the ultimate ground and meaning of all reality. . . . There is no criterion by which faith can be judged from outside the correlation of faith. But something else can happen: The faithful can ask himself or be asked by someone else whether the medium through which he experiences ultimate concern expresses real ultimacy.

The law in the moral type of faith demands obedience. This is a statement, or codification, of the way life ought to be. It is not so much faith in the encounter with a divine person as it is faith in the value of divine structure:

> The divine law is of ultimate concern in both old and new Judaism. It is the central content of faith. It gives rules for a continuous actualization of the ultimate concern with the preliminary concerns of the daily life. The ultimate shall always be present and remembered even in the smallest activities of the ordinary life. On the other hand, all this is worth nothing if it is not united with obedience to the moral law, the law of justice and righteousness. The final criterion for the relation of man to God is subjection to the law of justice. It is the greatness of Old Testament prophetism that it undercut again and again the desire of the people and, even more, of its leaders, to rely on the sacramental element of the law and to neglect the moral element—the "ought to be" as the criterion of the "being." (Tillich 1957, 67–68)

James Fowler (1996) presented a developmental taxonomy of faith stages in his book *Faithful Change*. He claimed that faith is a multidimensional construct that is "foundational to social relations, to personal identity, and to the making of personal and cultural meanings" (Fowler 1996, 55). As such, Fowler claimed that faith is generic to all human beings. He offered seven stages in faith development, summarized in Table 13.1.

John Mabry (2006) offered a taxonomy of ways in which people live faithfully in the world. It illustrates that faith is something people do, and not just something people have. A complete explication of his model is beyond the scope of this chapter. It consists of a consideration of eight features of the faith in question: (1) how the Divine is imaged, (2) the nature of one's relationship with the Divine, (3) how one constructs meaning in the world,

Table 13.1 Stages of Faith Development

Stage	Age	Description
Primal faith	Infancy	A prelinguistic disposition of trust develops in the mutuality between infant and primary caregivers
Intuitive-projective faith	Early childhood	Based on meaning making from emotional-perceptual ordering of experience; children's experiences of power and powerlessness orient to existential concerns of security and safety; early cognitive limitations result in potent emotional and imaginal orientations toward good and evil
Mythical-literal faith	Middle childhood and beyond	Concrete operational thinking makes possible more stable forms of conscious interpretation of experience; cause and effect and simple perspective taking emerge and influence faith development. This stage structures the ultimate environment along the lines of simple fairness and moral reciprocity: goodness is rewarded and badness is punished.
Synthetic-conventional faith	Adolescence and beyond	Early formal operational thinking influences interpretation of experience; mutual interpersonal perspective taking becomes more complex; identity and personal interiority loom large. The worldview is lived and asserted rather than asserted with critical reflection.
Individuative-reflective faith	Young adulthood and beyond	Examination of the previous stage's tacit beliefs, values, and commitments; the self as previously defined and identified must also reorient, and the person assumes the responsibility for locating authority for beliefs. A third-person perspective taking facility influences reflection on the processes and objects of faith.
Conjunctive faith	Early midlife and beyond	Boundaries of self and faith in the previous stage are dissolved; the executive ego admits inadequate understanding/information or illusion; faith maintains the tension among multiple perspectives, paradoxes, mysteries, etc. Epistemological humility becomes prominent.
Universalizing faith	Midlife and beyond	Faith moves beyond paradoxical awarenesses and defensiveness, embraces polar opposites that are hallmarks of the conjunctive stage, and exhibits openness, being grounded in love and regard for God.

(4) what sources of spiritual wisdom are accepted, (5) how spiritual growth is assessed, (6) what spiritual disciplines and practices are honored, (7) what the advantages of any particular way might be, and (8) what its disadvantages might be. He used the illustration of a six-pointed star, composed of two overlapping triangles, and each point in each triangle corresponded to a different way of manifesting faith. These are listed and described in Table 13.2.

Table 13.2 Styles of Faith, Indicating Ways in Which People Believe

Triangle	Faith Styles	Descriptions[a]
Primary triangle	Traditional believers	Hierarchical cosmology, clear delineation of authority; related to God as a sovereign and beneficent Divinity; meaning found in Divine will for one's life; source of spiritual wisdom is in sacred texts and tradition.
	Spiritual eclectics	The Divine is a spiritual force animating all of nature; no distinction between nature and God; meaning found in protecting the biosphere and promoting greater consciousness; source of spiritual wisdom found in all spiritual traditions, one's own experience, and in the body.
	Ethical humanists	The Divine is all life itself; one is related to God by being related to all of life; meaning is made through compassionate action on behalf of all life; wisdom is sourced in the natural world and the scientific method.
Secondary triangle	Liberal believers	Divine seen as friend, lover, or coworker; the nature of the relationship with God is familial and idiosyncratic; meaning is found in showing mercy, doing justice, and walking humbly; sources of spiritual wisdom are tradition, sacred texts, reason, and experience.
	Religious agnostics	Divine imaged as unknowable mystery; relationship mediated by intellectual pursuit and philanthropic activity; meaning patched together idiosyncratically; sources of spiritual wisdom are found in personal experience and reason.
	Jack believers	Divine seen as an angry judge, and one's basic relationship with God is characterized by estrangement; meaning is constructed only in negative terms, and the sources of spiritual wisdom are in tradition and Scripture, but these are not appropriated, as they are rejected.

[a]Descriptions here are limited to some of descriptors of the Divine image, relationship with the Divine, and sources of spiritual wisdom because of space limitations.

Avery Dulles (1994) also identified several models of faith. Although he had much to say about these models, it is instructive to see the short, summary descriptions he offered to identify these respective versions (given in Table 13.3). They offer a quick grasp of some of the various ways in which people conceptualize their exercise of faith.

Intentionality and Perception

Underlying all these types, stages, styles, and models of faith are two phenomenological considerations that are more mundane, yet deserve attention. They arise from contemplating intentionality and perception, and they provide a simple ground for contemplating a biblical explication of faith and belief in miracles.

Intentionality is a central concept in phenomenological philosophy. It refers to the power of a mind to be about or to hold as figure, to represent, or to stand for, things, properties, and states of affairs (Jacob 2003). Franz Brentano claimed that in every mental act, something is included as object within itself. For instance, in presentation, something is presented; in wanting, something is wanted; in faith, something is "faithed" (i.e., something is believed and/or trusted, expected, or counted on). Central to any such experience is its intentionality because all experience is directed toward something by its content or its meaning (Smith 2002).

The intentional object can be present to the senses or absent. It may be a little of both. For instance, consider a box. Viewed from one concrete

Table 13.3 Models of Faith

Model	Description
Propositional model	Faith is an assent to revealed truths on the authority of God, the revealer.
Transcendental model	Faith is a new cognitive horizon, a divinely given perspective that enables one to see and assent to truths that would otherwise not be accepted.
Fiducial model	Faith is more closely identified with trust; not primarily intellectual, faith arises from the heart and the will.
Affective-experiential model	Faith is a felt experience through encounter with the living God and inward confirming work of God's Spirit.
Obediential model	Faith is an obedient act of acknowledgment and compliance.
Praxis model	Faith finds expression in human activities directed toward overcoming the alienations in contemporary society.
Personalist model	Faith unites to another subject, introducing one to another thought and another love; it is participation in the life of God.

position, a person can only have one perspective at a time on such a box, and in that experience, a person can only see one side of the box at a time; however, the entire box is presented phenomenologically. One does not contemplate a two-dimensional picture of a box (or else that is what the experience would be about—a picture of a box); one contemplates the entire box, the real box, including those sides that cannot be seen fully, or seen at all. Thus what is not seen is believed to exist because those unseen parts are aspects of the holistic gestalt.

In a similar way, intentional objects that are not actually physically present can still be aspects of experience. Indication signs point toward an absent object, but a real object nonetheless. A hat reminds someone of a best friend. A picture brings to mind a remembrance, stimulates an imagination, or promotes an anticipation. These can all be experiences of intentional objects that cannot be seen, but are of actual objects, places, events, or people, not present to the senses but presented to the mind. Categorial intending, on the other hand, presents "states of affairs and propositions, the kind that functions when we predicate, relate, collect, and introduce logical operations into what we experience" (Sokolowski 2000, 88). Thus, when we read a newspaper headline and suddenly contemplate the construct of justice, we are experiencing categorical intentionality.

All these features of intentionality, in which one involuntarily comprehends something through a partial perception, a symbolic indication, or logical implication of reason, can be considered automatic (Moors and De Houwer 2006); they are examples of intentional faith. Why? Because they are held in the mind as real, even if only for the purposes of contemplation. They are not held in the mind as false positives unless presented *as* false positives.

One of the mind games people learn somewhere in a usual education is to ponder the question, "If a tree falls in the forest, and no one hears it, does it make a sound?" The solipsist would say that there would be no sound because it takes a hearer to constitute a sound—humans being the measure of all things and such. To that, representationalists claim that we do not have actual contact in our surroundings, but that our brains reconstruct the perceptual stimuli so as to make them manageable, understandable to us. Thus we might actually hear a tree fall, but we cannot know if the sound we hear is actually the sound that that tree makes because everyone's ears convert the sound waves in their own manner of hearing. The philosopher and phenomenological thinker Maurice Merleau-Ponty (1968) coined a term, *perceptual faith*, to indicate that some things must be taken, in a modified realism, to be what we perceive them to be.

I hear what sounds like a tree falling in the forest. It does not sound to me like a jet plane, a bird singing, or a cat calling in the night air. I think, "A tree fell out there somewhere in the forest," and my question is not what

happened, but exactly where it happened. I instinctively know that a tree fell because I have immediate trust in my perception—it is suitable to me on the basis of perceptual faith.

For psychologists, this issue might be covered under the term *validity*. In reference to perceptual faith, it might be refined to refer to phenomenological validity. How accurate are the perceptions in question, and thus is any given occasion of perceptual faith well founded? Good perceptual faith would be trust well founded, but bad perceptual faith would be trust ill founded. Why? Faith that is founded on something that is not true, that is not actual, leads to mistakes. Thus issues of philosophical or logical validity stand behind the construct of perceptual faith.

I used to go round and round on these issues of faith, trust, validity, and truth with a friend of mine, Sylvia Fleming Crocker. Sylvia is a gestalt therapist living in Wyoming, who wrote a good book a few years back (Crocker 1999), and she believed that there is a difference between religious faith and mundane faith. She believed these two were actually diverse categories. I contended that faith is faith, but that the objects of faith might change, giving the appearance that religious faith was one thing and mundane faith was something else.

The Bible defines *faith* as the conviction of things unseen, the proof of things hoped for, and the trust it takes to act on what one holds to be true (see subsequent discussion). Without that last part, action based on what one holds to be true, Jesus' brother James asserted that faith is dead. Is this any different from perceptual faith? Certainly we trust in our perceptions. In fact, this is Merleau-Ponty's point, that we trust so much in what we perceive that it is rather automatic and leads to a holistic, lived-body response. We act in accord with our perceptions. We see the kitchen knife, we reach to pick it up and cut the onions, and we do so without questioning if we are actually seeing a real knife, or if the knife is actually there. The only people who do question such things are those who have lost their perceptual faith because they have suffered some neurological or psychological disorder that interrupted the normal flow of their perceptual experience:

> The methods of proof and cognition invented by a thought already established in the world, the concepts of object and subject it introduces, do not enable us to understand what the perceptual faith is, precisely because it is a faith, that is, an adherence that knows itself to be beyond proofs, not necessary, interwoven with incredulity, at each instant menaced by nonbelief. Belief and incredulity are here so closely bound up that we always find the one in the other, and in particular a germ of non-truth in the truth: the certitude I have of being connected up with the world by my look already promises me a pseudo-world of phantasms if I let it wander. . . . It is therefore the greatest degree of belief that our vision goes to the things themselves. (Merleau-Ponty 1968, 28)

Thus, to me, faith is not a tremendous leap, some kind of fanatical loss of reason that makes a person trust in Jesus Christ, for instance, but a specific application of a dynamic principle of life so common to human experience that we could not live without it.

A BIBLICAL PERSPECTIVE ON FAITH

Alister McGrath (1993) described the Christian community's understanding of the word *faith* as comprising belief that something is true, trust in that veracity, and entrance into the substance of whatever issues are involved with actions based on such faith. He used the illustration of having a disease and having a bottle of antibiotics. One believes that, in truth, the antibiotics can heal the disease, but one does not trust and enter into the benefits of faith until one actually acts on that belief and takes the medicine.

Dietrich Bonhoeffer (1963) championed biblical faith as expensive; it was not merely intellectual assent because it cost a person something to act on what he or she believed. That could be the risk of the loss of life, but it could also be the risk of the loss of esteem and respect in the eyes of significant others. Cheap grace, by contrast, would be the love of God and faith taught as mere conceptions—an intellectual exercise as part of an academic conversation that could be enjoyed by all without loss of respect because devotion, allegiance, and investment in the truth of concepts discussed would never be tested. Dallas Willard, quoting Luther, claimed that such faith, such cheap grace, was never conceived to be biblical faith because faith in its nature is busy and powerful. It cannot cease doing what is good; so the person who does not actually do good is a person who lacks real faith. That person feels around looking to find faith and good works but can't find them because he or she does not know them deep inside and cannot recognize them in others. By contrast, Luther held that faith is well-founded confidence in the grace of God that is so precious, so strong, that it would never surrender its conviction (Willard 1991). Such faith is transforming; it stimulates a person to tell others of the great impact such faith has had (Jackson and Jackson 2005; Yancey 2003; Monroe 1996).

Sixteenth-century thinkers identified three levels of biblical faith: *notitia*, *assensus*, and *fiducia* (Sproul 2003). *Notitia* is the content one is poised to believe. *Assensus* is the intellectual assent to a proposition. In terms of a biblical faith, it is the belief that something is or is not factual. *Fiducia* is personal trust and reliance on such facts; it is the belief in the propositions or persons in question:

> Upon reading or hearing a given teaching—a given item from the great things of the gospel—the Holy Spirit teaches us, causes us to believe that *that* teaching is both true and from God. . . . But faith is also "the evidence of things not seen." By faith—the whole process, involving the internal

> instigation of the Holy Spirit—something becomes *evident* (i.e., acquires warrant, has what it takes to be knowledge). And what thus becomes evident or warranted is indeed not seen. This doesn't mean that it is indistinct, blurred, uncertain, or a matter of guesswork; what it means is that the belief in question isn't made evident by way of the workings of the ordinary cognitive faculties with which we were originally created. (Plantinga 2000, 260–65)

In the Bible, two words account for most of the references to such faith. One is a Hebrew word and the other is a Greek word. The Hebrew word is *aman*, and the Greek word is *pistis*.

The Hebrew word is related to the English word *amen*, which is often said at the close of prayers to express certainty. That is the essential significance of the Hebrew word in the context of the Old Testament as well: "The basic root idea is firmness or certainty" (Scott 1980, 51). It is sometimes conveyed in the figures of the strong arms of a parent upholding a child or the pillars of support on a building. At other times, a causal nuance is understood, so that it means to cause to be certain or sure. In the Hiphil conjugation of the Hebrew verb, the meaning becomes "to believe," indicating that biblical faith is "an assurance, a certainty, in contrast with modern concepts of faith as something possible, hopefully true, but not certain" (Scott 1980, 51).[1]

The word *pistis* can be traced to the classical Greek period, at which time it referred to the trust that a person might place in other people or the gods, credibility, credit in business, guarantee, proof, or something entrusted (Michel 1975). The concept took on religious overtones at an early date; in Homer the gods vouched for the validity of an alliance or treaty, and the trustworthiness of an oracle could be applied directly to divinity. The power of the gods to save in times of trouble was something addressed by *pistis*. During the Hellenistic period, which was characterized by increased skepticism, *pistis* acquired the sense of conviction as to the existence and activity of the gods, and a didactic element emerged as the basic meaning: *pistis* as faith in God indicated a theoretical conviction. Stress was, nevertheless, placed on how one might live, given such a conviction. The Stoic perspective accepted a divine ordering of the world, with the individual as the center as an autonomous, moral being. A person's fidelity to his moral destiny led to fidelity toward other people. In the mystery religions, one abandoned oneself to the deity by following the deity's instructions and teachings and by putting oneself under the deity's protection. In secular Greek, then, *pistis*

> represents a broad spectrum of ideas. It is used to express relationship between man and man, and also to express relationship with the divine. The particular meaning is determined by the prevailing philosophical and religious influences. Originally it had to do with binding and obligations. But Stoicism made out of it a theoretically based law of life which brought

> the individual man into harmony with the cosmos. There was also a dangerous development in which *pistis* was demanded in response to a claim of revelation which was not subject to any control. (Michel 1975, 595)

The Septuagint (LXX) translates the Hebrew *aman* in the niphil conjugation to mean "to be true, reliable, or faithful." An emphasis is made on the word of God preserving dependability and being confirmed subsequently by some kind of action (1 Kgs 8:26; 1 Chron 17:23ff.). In addition, Gen 15:6 is important for the connection between the Old Testament and the New Testament (cf. Rom 4:3, 9, 22ff.; Gal 3:6; Jas 2:23). Abraham's faith is his readiness to adhere to the promises of God, finding security and grounding in the word of God; in turn, God responded to this trust as "behavior appropriate to the covenant relationship" (Michel 1975, 596).

In the New Testament, *pistis* means "faith" and "trust" (Arndt and Gingrich 1957). This can refer to things that stimulate trust and faith in others such as the reliable work of a servant (Tit 2:10) or the example of someone else's enduring faith (2 Thess 1:4); it can also refer to trust, confidence, and faith in the active sense (Rom 4:5, 9, 11–13, 16; Eph 2:8; Col 2:12; Heb 11:4–33, 39). More pointedly, it can refer directly to that which is believed—the object(s) of faith (Gal 1:23; 1 Tim 1:19, 4:1, 6, 6:10; 2 Tim 4:7).

In one of the classic assertions of the New Testament, faith celebrates "the reality of the blessings for which we hope, the demonstration of events not seen" (Lane 1991, 328).

A CLINICAL INTEGRATION

Kierkegaard claimed that to take a leap of faith was to risk losing one's footing, but not to take it was to risk losing one's self (Gaffney 2006). Perls, Hefferline, and Goodman, the founders of gestalt therapy, said (1951, 343), "Faith is knowing, beyond awareness, that if one takes a step there will be ground underfoot; one gives oneself unhesitatingly to the act, one has faith that the background will produce the means."[2]

Thus faith becomes the instrument of knowing and an essential principle of contact. In a gestalt therapy training group, for instance, when a student takes that first step of working as therapist, the student entrusts himself or herself to the other people present and to the process of training, and that faith becomes supportive. No matter what, it will turn out for the good because even if the trainee does his or her worst work, the training group will make good use of it. Such faith is one of the means by which the student learns and comes to know the experience of working as a therapist, of taking risks and of experimenting. Without such faith, one would not likely take those steps and find ground underneath.

Just so in the spiritual realm: one steps out believing God for something, and there is further experience; the ground really does show up under the foot, so to speak. One pushes back, toward God, trusting in the relationship, and there is confirming experience; it is a response only those who engage God through dialogical encounter can understand. This is at the core of Martin Buber's thinking on dialogue.

Kierkegaard's individualistic, passionate, and decisive faith, Goodman's ground of faith, and Buber's encounter with divinity are all at the heart of both existentialism and gestalt therapy. Indeed, gestalt therapy is an existential-phenomenological system that is built solidly on faith. One cannot be present unless one is present authentically and responsible for one's own experience, but that is risky, and it requires trust in the process. One cannot practice a phenomenological method without exercising perceptual faith, trusting that what one observes of the client and what one experiences in the presence of the client is contact within a real context, forming intentional figures of interest in a natural cycle of formation and destruction.

Indeed, the bracketing involved with such a process is for the purpose of attending to the data themselves, the about-ness of it all, presented to the therapist through the presence of the client. That is perception in the lived-world through the lived-body. Gestalt therapy is also a phenomenological field theory, meaning that the individual experiences of therapist and client meet and form an intersubjective sphere of influence; however, biblically speaking, they are not alone. Instead of a two-person field, it is a three-person field—a meeting of therapist, client, and divinity:

> Someone who has learned to yield to the world of "Holy Spirit consciousness" has tapped another reality outside the province of language and rationality. This shifts from the normal analytical arena, where things occur in sequence and on a line, to a more holistic gestaltic perception. It is not enough for someone simply to have had "mystical" experience for this ability to accrue. Indeed, the Scriptures clearly talk of "walking in the Spirit" and "being led by the Spirit" (Rom. 8:1,14; Gal. 5:16). This denotes duration and a learning process, as God the Holy Spirit seeks to teach us to become like Christ. Spirit-directed living has as its result not a separation from humanity, but deep involvement in interpersonal relationships. (Tarr 1985, 13)

By faith, a gestalt therapist can open himself or herself up to the presence of God, seeking God's help in understanding and working with any given client situation. This is more than a mere cognitive gimmick to shift the thinking of the therapist; by faith, the believing therapist engages in a dialogical relationship with divinity, practicing a partnership with divinity that allows the therapist to ask God's help to remain present to the client, to risk self-disclosure and authenticity as appropriate, to abide the anxiety of the safe emergency that might not always feel so safe, and thus not to hold so tight to

the therapeutic process. By faith, the therapist can choose to shift the emphasis in how he or she is working, moving from a phenomenological emphasis to a dialogical, or to the freedom of an experiment, or to a field theoretical strategy—all mainstays of gestalt therapeutic process (Brownell in press).

CONCLUSION

Existential faith requires freedom, choice, and authenticity. It takes responsibility for one's experience. Phenomenological faith includes the automaticity of holistic gestalts in intentional objects of perception and categorial intentionality.[3] It also includes the basic elements of perceptual faith. Biblical faith celebrates the reality, the certainty of things hoped for and the evidence of things unseen. By biblical faith, one enters into dialogical relationship with God and can practice the presence of God in every aspect of life, including that of therapeutic process. Through faith, a person can remain present to contact in the midst of otherwise challenging situations and relationships. Faith is a basic condition and supportive principal of contact by which people come into being and sustain life. Belief in miracles calls on all of these dynamics and thus is not an unexpected phenomenon in a moment or experience of perceived unconventional experience.[4]

NOTES

1. Scripture taken from the New American Standard Bible (1995), The Lockman Foundation.

2. Intentionality is an important construct in phenomenological philosophy and consequently it also pertains to qualitative or phenomenological methods of research in science, as well as to the more phenomenological approaches to psychotherapy such as the Gestalt therapy model described in this chapter.

3. Here, the use of the word *intention* or the implication of intentionality is to denote purpose or goal. That is in contrast to the phenomenological use of the word, which people often find confusing. Intentionality, in its phenomenological sense, will be defined subsequently in this chapter as well as in this author's other chapter in this overall work ("Personal Experience, Self-Reporting, and Hyperbole," volume 3, chapter 11).

4. As already seen, phenomenologists understand differing types of intentionality, sometimes acknowledging a relatively more narrow sense, as in object-directedness, while at other times referring to an openness to the world or "what is 'other' ('alterity')" (Thompson 2007, 22).

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CHAPTER 14

The Healing Power of the Will to Live

Joanne Hedgespeth

One way of understanding the underlying aspects of healing can come from an exploration of specific psychoanalytic concepts regarding the will to live and the will to die. Of particular relevance are the theories of Sigmund Freud, the founder of psychoanalysis, and the more current psychoanalytic theories of the British object relations theorists, especially Melanie Klein. The will to live is articulated psychoanalytically by the theory of *Eros* (life instinct) and the will to die by the theory of *Thanatos* (death instinct), both of which shed light on the process of healing. If one recognizes the mind/body/spirit as whole and indivisible, then the significance of emotional factors in healing is clear. Healing is thus associated with integration and growth and the will to die with disintegration both emotionally and physically. The highlight of this work gives emphasis to the emotional aspects of the healing process.

This chapter explores the concepts of the life and death instincts first conceived by Freud, then further developed by Melanie Klein and her followers. Connections between these theories and the process of healing/integration are identified. An understanding of the early developmental stages of growth is also included, along with a description of factors that inhibit growth. The will to live is a powerful force that can overcome the sabotaging influence of the will to die. The life instinct is viewed as an impetus toward growth, ultimately leading to care and concern for the self as well as others. As such, it may also be seen as a spiritual force consistent with Judeo-Christian religious teachings.

FREUDIAN CONCEPTS OF EROS AND THANATOS

In the early twentieth century, Sigmund Freud, the founder of psychoanalysis, hypothesized two basic instincts inherent in the human condition: the life instinct (the will to live) and the death instinct (the will to die). Eros, the life instinct, includes the contrasting instincts of self-preservation (hunger instincts) and the preservation of the species (love instincts), both of which serve as unifying and binding forces. The life instincts are constructive and are directed toward progress and higher development. Civilization is basically the work of Eros libidinally binding humans to one another in an attempt to preserve life for the human species.[1]

Sexuality, an important aspect of Eros, was initially viewed by Freud in the narrow, genital sense of the term but was later expanded to include bodily pleasure, which may or may not serve a reproductive function. Freud used the term *libido* to refer to the energy of the sexual or love instinct. The aim of the love instinct is to strive after objects and ultimately to preserve the species. Eros also includes the contrasting instincts of ego-love and object-love as Eros can be directed inwardly toward the self or outwardly toward others.

Thanatos (the death instinct) works in opposition to Eros and is a destructive force. It can operate internally and can be largely silently self-destructive, or it can be diverted outwardly and be destructive toward others. Freud posited that unexamined aggression is unhealthy and can lead to physical illness.[2]

Initially, Freud viewed hate or aggressiveness as closely connected to the instinct of self-preservation and mastery. He viewed hate as older than love and stated that hate is a result of the "narcissistic ego's primordial repudiation of the external world with its outpouring of stimuli."[3] He noted that the ego develops hate, pursuant to any object that is a source of unpleasurable feelings, and can result in aggressive and destructive inclinations toward the object. He later went on to hypothesize a separate death instinct that seeks to bring about death as a return to an earlier state of being. Aggression and cruelty toward others are now seen in a Freudian perspective as secondary and are derived from the death instinct, which is primarily self-destructive. Freud viewed the constancy principle, the tendency to reduce tension due to stimuli (also termed *Nirvana*), as a strong support for his hypothesis of the death instinct.[4]

According to Freud, Eros and Thanatos are in constant conflict. However, the death instinct can be neutralized through its fusion with the life instinct. It can also be diverted toward external objects through the destructive or aggressive impulses, or a large extent of the death instinct may remain inside the individual, working in a silent, but self-destructive, manner. Eros attempts to render the death instinct innocuous by diverting the destructiveness or aggression outwardly, where it may be viewed as destructive or as an instinct for mastery or the will to power.

In *Civilization and Its Discontents*,[5] Freud theorized that the portion of the death instinct that was directed toward the external world could be used to service the life instinct because the individual would be destroying something animate or inanimate in the external world, rather than destroying itself. In other words, self-destruction would increase when there was a restriction of outward aggression. Freud viewed the inclination to aggression as the greatest threat to civilization. Thus civilization is built up at the sacrifice of the individual's need to express his or her aggressive instincts and results in some unhappiness in the ego at having to sacrifice for the needs of society and in having some of the aggressiveness directed at the self.

Bruno Bettelheim, a psychoanalyst and one of Freud's followers, argues that much of Freud's theories are misunderstood due to mistranslation in the English versions of Freud's writings.[6] He states that the word *instincts* should be translated as *impulses* or *drives*. For example, we may say someone is driven by ambition or fear. Destructive or self-destructive actions may have been provoked by a mostly unconscious death drive or impulse. There is a constant internal struggle between the two contrary impulses, leading to suffering and conflict. As humans, we need to find a way to manage these inner contradictions.

Bettelheim agrees with Freud's assumption that there are strong destructive impulses within our psyche (soul). Our task is to help the life drive from the potential damage of the darker, more destructive impulses. He advocates psychoanalysis as a way of gaining greater awareness of the darker aspects of life, which can help us to have love and concern, leading to a better life both for ourselves and future generations. Psychoanalysis is "an introspective psychology that tries to elucidate the darkest recesses of our soul—the forces least accessible to our observation."[7]

Eros, an equally powerful force within, assists us in making relationships better. Bettelheim sums up Freud's view of the good life as being able to have positive, mutually gratifying, loving relationships and satisfying, meaningful work. This necessitates facing painful realities and difficulties, while maintaining a sense of optimism. Bettelheim ends his book with the following inspirational sentence: "We owe much to those before us and around us who created our humanity through the elevating insights and cultural achievements that are our pride, and make life worth all its pains; and we must recognize, with Freud, what those creators of our humanity did not deny but accepted and endured in the realization that only in conflict with itself can the human heart (as Faulkner said), or the human soul (as Freud would have said) attain what is best in life."[8] Thus, for Freud, the will to live is strong within us even as we struggle inside with the will to die. Healing comes from the life instinct, as we confront the darker aspects of life, modifying the potential destructiveness within and without.

KLEIN'S CONTRIBUTIONS

Melanie Klein, a psychoanalyst following in the footsteps of Freud, used her clinical work and observations of children to understand and elucidate early emotional development. She became one of the leading British object relations theorists and therapists, helping us to understand the importance of psychic reality and the inner world, not just in childhood, but in adult life as well. In her work, she accepted and expanded Freud's concepts of the life and death instincts, emphasizing the importance of our relations to objects (others).

From the time of birth, the infant experiences the internal conflict between the life instinct and the death instinct, in addition to experiencing the pains and pleasures of external reality. Much of emotional life can be seen as an interaction between self-preservation, pleasure, love, and hate.[9] To live pleasurably and securely, one needs to manage the destructive forces within. Love is a manifestation of the integrating life force, while hate and cruelty emanate from the more destructive death instinct. Klein posited inherent life and death instincts that immediately give rise to conflicts.[10] The death instinct creates a fear of annihilation and is experienced with anxiety by the infant. The destructive hating feelings are intolerable to the infant as they are felt to be a threat to existence and thus dangerous. He or she deals with these unbearable feelings by projecting aggression out onto an external object, initially, the mother.

The infant is relieved from the fear of annihilation from within but is now in the situation in which the outside world is experienced as dangerous. In particular, the mother is experienced as bad and threatening, resulting in feelings of persecutory anxiety on the part of the infant. The life instinct is also present, creating loving impulses and a need for self-preservation. The infant has an experience with a good mother that is infused with projected libido from the life instincts. The infant experiences gratification, as it feels pleasure and has its needs met.[11] Early objects for the infant are experienced as part objects, which are split into good or bad, ideal or persecutory. The infant attempts to keep in or introject the good object and keep out or project the bad object. Splitting (keeping the good and bad apart) is used as a defense mechanism to keep the good objects safe from the destructive impulses of the death instinct.

Klein's concept of splitting can be illustrated quite well by children's literature and play. Superheroes are all good and all powerful and are in conflict with evil figures needing to be conquered. Children prefer endings where good triumphs over evil. There is a clear division between good and evil, with the good representing the loving impulses and the bad representing destructive impulses. Ron Britton, another Kleinian analyst, posits that the arts and literature are attempts to represent externally that which is profoundly internal.[12]

It is interesting to note the constant interplay between internal forces and external reality. External reality, for the infant, is a mix of gratifying experiences, like the warmth, nurturing, and love from the mother, and painful, frustrating experiences of unmet needs. Internally, because of the need to deflect inner hatred and destructiveness, bad objects may be created even if not bad in and of themselves. Unfortunately for the child, a vicious circle may be created if the external environment contains a lack of love and understanding. This may accentuate his or her expectation of a bad world and increase his or her destructive impulses.[13] Similarly, gratifying experiences facilitate the life instinct, fostering growth and integration, leading to a healthy desire to explore reality and further cognitive development.

At this time in the infant's development, the infant perceives and relates to two part objects: the ideal, loving breast and the persecutory, frustrating breast. The infant's wish is to keep the good inside and deflect the bad outside. Klein calls this phase of development the paranoid-schizoid position as it is characterized by splitting (schizoid) and by paranoid persecutory anxiety that is fearful of annihilation. Both loving and destructive impulses are projected and introjected to preserve the good from being destroyed by the bad. The infant's fear of annihilation (from the death instinct) creates anxiety that is defended against by a projection into the external object, making it persecutory, and by aggression directed against this external object. A projection of the life instinct also occurs, resulting in an idealized external object.

At this point, the good and the bad are kept separate or split, and both self and object are split into good and bad parts. The good self and objects are separated from the bad to protect the good from the contamination of destructiveness. Fortunately, as the baby takes in nourishment and love, which support life, he or she takes in loving feelings of the life instinct, which are used to neutralize the destructiveness of the death instinct. As the baby introjects good experiences, he or she internalizes good internal objects, facilitating healthy development. As love predominates, persecutory anxiety decreases, and ego integration and synthesis increase. Positive stimuli in the infant's environment reinforce trust, while negative environmental stimuli, such as lack of love and nurturance, reinforce splitting, disintegration, and persecutory anxiety. In addition, Klein noted that in some infants, aggression is innately strong, leading to difficulty tolerating frustration and anxiety. There is a constant interplay between environmental factors and constitutional factors in the emotional growth of the baby.

As the infant continues to develop normally, at about six months of age, he or she gradually enters what Klein termed the *depressive position.* The child begins to become aware that there are good aspects to the bad or frustrating objects, and bad aspects of the good or ideal objects, and that indeed, they are really one whole object with good and bad parts. The experience of love and

hatred become closer together, resulting in feelings of ambivalence toward the mother and others important to the infant. As a good object becomes introjected, there is a feeling of a good internal object that reduces persecutory anxiety. The ego becomes more integrated and synthesized. The baby also becomes more aware and tolerant of his or her own aggressive impulses and has less need to project the bad outwardly.

Along with this process of decreasing projection and splitting, there is consequently less need to fear the persecution of others. The infant's anxiety in the depressive position is no longer persecutory, but is of a fear of causing harm to his or her objects, upon which he or she pours love and depends. This creates feelings of depressive anxiety and guilt. "The depressive conflict is a constant struggle between the infant's destructiveness and his love and reparative impulses. Failure of reparation leads to despair, its success to renewed hope."[14]

Normally, the infant is able to work through these feelings, and reality testing increases; that is, there is a better capacity to differentiate unrealistic phantasy (inner psychic reality) and external reality. There is an inhibition of aggressive impulses, and efforts at reparation are made when he or she experiences feelings of guilt for hurting his or her loved object. As this developmental process occurs, he or she becomes more aware of self as separate from love objects. The child feels concern for others and is aware of his or her own impulses of love and hate.

Klein called the paranoid schizoid and depressive processes *positions*, rather than *stages*, to emphasize that they both recur throughout life and that the anxieties associated with each position are never fully worked through. Initially, the baby alternates between experiences of disintegration and integration and then gradually develops more integration and a greater capacity to relate to a whole object or person toward whom he or she has ambivalent feelings. The healthy object relation is neither all bad (persecutory object) nor all good (idealized object), but rather is a whole, with both gratifying and frustrating aspects.[15]

When development is healthy, the death instinct is in service of the life instinct, resulting in healthy aggression. If the death instinct is predominant, perversions may occur. It is hoped that the depressive position will have sufficient resolution and that the infant will have a strong capacity to retain good objects internally. The child will need these good internal objects to help him or her later, as he or she experiences the realities of life that always include situations of loss and feelings of anxieties related to guilt and ambivalence.

John Steiner emphasizes Klein's view of normal splitting as important for healthy development.[16] Splitting is a way of helping the infant organize the chaos of postnatal experience. If there are sufficient good experiences, the infant can grow in a healthy way, and splitting is decreased. When the environment does not provide sufficient nurturing, the infant's persecutory anxieties and fear of annihilation are not allayed, and the splitting becomes

pathological. In this situation, the infant relies on splitting as its main strategy for survival, and growth is impeded. In healthy development, integration of self and object occurs, and the infant's focus is no longer on self-survival. Instead, he or she is able to tolerate his or her dependence on the object and have feelings of love and concern.

Envy was viewed by Klein as a derivative of the death instinct and as a hostile, life-destroying force. Along with the experience and recognition of needs, there is a painful awareness of dependence and a hatred of needy feelings and the needed good object. Envy is aroused by feelings of gratification experienced from the object and because of the goodness of the object. Awareness of separateness and the value of the object also stimulate envy. Envy begins as a destructive spoiling function, when it is realized that one cannot possess the needed other. The infant spoils the object to rid himself or herself of the painful, envious feelings. Unfortunately, envy hinders healthy development in light of the fact that when the good object is turned bad, there is no longer a good object to internalize. If the envy is not too powerful, it can become integrated, and healthy feelings of love and admiration will occur. Feelings of gratitude can overcome and modify feelings of envy.[17]

One of Klein's major theoretical contributions was her understanding of manic defenses. As the infant develops, he or she experiences painful feelings of dependence on a valued object (mother), ambivalence, fear of loss, separation, and guilt. Manic defenses are erected to protect the ego from psychic pain and feelings of despair. They are used as a way to defend against the reality of the vulnerability of the human experience, including the limitations of the self and others. When manic defenses are operating, objects are treated with feelings of contempt, control, and triumph. The object is devalued, controlled, defeated, and attacked, eliminating the need for painful feelings of dependence, loss, concern, and guilt.[18]

Herbert Rosenfeld, one of Klein's followers, expanded on Klein's theories by exploring the destructive aspects of narcissistic object relationships and the importance of understanding these dynamics in psychoanalysis.[19] He describes the prominent role that omnipotence plays in narcissistic object relations and states that objects are treated as the baby's possession and are used as containers for undesirable parts of the self to rid the self of pain and anxiety. Defenses are used to avoid any recognition of separateness between self and object to avoid painful feelings of dependence and the anxieties that result from the inevitable frustrations inherent in a dependent relationship. By omnipotently identifying with the object, the narcissist avoids the painful awareness of envy and the aggressive feelings caused by the frustrations associated with dependence on an object.

Rosenfeld goes on to say that in severe narcissistic disorders, rigid defenses are erected against any awareness of psychic reality. In these disorders, the anxiety that results from any conflicts between parts of the self or between the self and reality is intolerable and thus evacuated into the object.

In analysis, the patient desires a lavatory mother, into whom he or she can discharge everything unpleasant and relieve himself or herself. Progress in the analysis is made only when the patient is able to acknowledge the feeding function of the analyst, to recognize the analyst as separate, and to accept the attendant depressive anxieties and frustrations.

In a later paper, Rosenfeld further elaborates this process by saying that the narcissistic patient would like to believe that he or she has given life to himself or herself, and can certainly look after self, not needing anyone. He or she reacts destructively to evidence that he or she is dependent on the analyst and may act out in self-destructive ways. This dynamic parallels how the young child was unable to accept dependency on the mother earlier in life. At times, these patients may devalue the analyst's work. "In this way they assert their superiority over the analyst representing life and creativity by wasting or destroying his work, understanding, and satisfaction. They feel superior in being able to control and withhold those parts of themselves which want to depend on the analyst as a helpful person."[20] The conflict between the destructive and libidinal parts is resolved by getting rid of the loving, dependent part of the self, being left with only the destructive, narcissistic part. The patient is then able to feel superior and avoid the envy, conflict, and anxieties that accompany awareness of the dependent self.

Rosenfeld also links the destructive, narcissistic parts of self, in some cases, to psychotic structures or organizations that are split off from the rest of the personality. This psychotic structure may be dominated by an omnipotent notion that there can be complete painlessness within the delusional object, which may provide the patient with a false sense of security by promising quick, painless solutions to all conflicts and problems. Clearly this is quite seductive and can lure any sane parts into the delusional structure. This part of the personality perceives progress as quite dangerous, which may lead to a severe negative therapeutic reaction.

When this occurs, the patient may lose contact with his or her capacity for thinking and sense of reality. The patient may withdraw from the world and often feels drugged. This may be accompanied by a desire to stay in bed, missed sessions, and complaints of feeling trapped and claustrophobic. When this occurs, the sane, dependent part of the self has become completely dominated by the destructive, omnipotent, narcissistic self and must be recovered through analysis.

The analyst must also work to uncover and expose the destructive, omnipotent parts of the self. "In other words, the patient becomes gradually aware that he is dominated by an omnipotent infantile part of himself which not only pulls him away towards death but infantilizes him and prevents him from growing up, by keeping him away from objects who could help him to achieve growth and development."[21]

Rosenfeld also discusses a clinical approach to the theory of the life and death instincts, describing the difference between the libidinal and destructive aspects of narcissism. According to Rosenfeld, the violence of the destructive impulses can vary from person to person and can oscillate within the same individual. In other words, there may be times when the libidinal, life-generating aspects predominate, and other times when the destructive aspects are dominant. When the libidinal aspects are dominant, the person is able to recognize the separateness and the value of a needed object—the analyst, for example—and to experience conscious envy of the object's good qualities.

In contrast, there are times when the destructive aspects are dominant and manifest as a wish to destroy the object as the source of goodness, and also destroy the self. There may be a wish to die, and death may be viewed as a solution to the problems of life. The most dangerous situation is that in which there is a severe split, making the destructive aspects completely defused from the libidinal, caring self. So the life instinct allows the individual to be in contact with a loving self who needs and is concerned for others, while the destructiveness of the death instinct despises this loving, dependent self and attempts to eliminate these feelings.

Instead, the destructive self retreats into narcissism, admiring the self, devaluing others, and feeling superior. There is a sense of self-sufficiency and a denial of need for relationships with others. Clearly this interferes with healthy development since it prevents the person from turning to others, who could help him grow. A positive, libidinal, dependent self is important in establishing healthy object relations and neutralizing the destructive narcissism.

Hanna Segal and David Bell indicate that narcissistic object relations are a result of splitting of good and bad objects internally and are characteristic of the paranoid/schizoid position.[22] The aim is to protect the good self and objects from the murderous objects that contain the split-off aggression. Like Rosenfeld, they indicate that the person with narcissistic object relations is not able to bear the anxieties of the depressive position, which include anxieties about separation, the fear of loss, and the guilt and concern about damaging good objects. The person is also not able to bear the envy that comes with recognizing the goodness of the object.

As these anxieties become more tolerable, the person will develop a greater capacity for differentiating self and object and a firmer relation to internal and external reality. The person with narcissistic object relations uses projective identification to omnipotently deny and project aspects of the self. The object then becomes identified with those projected aspects, and its real properties are obscured. Narcissistic patients are thought to be equally prone either to idealize or denigrate their objects and have a profound incapacity to see objects as they really are.

According to Segal and Bell, the ego of the narcissistic person is weakened through the excessive use of denial and projection. He or she can also be quite paranoid and become preoccupied with the state of his or her objects. In analysis, he or she may be quite attentive in terms of what the analyst's interpretations suggest about the state of mind of the analyst. Klein's 1946 paper is cited, in which she referred to *schizoid object relations*, which is the term used by Klein for these clinical phenomena.[23] In this paper, Klein aptly described the relationships of these patients to be either detached, due to the fear of the objects, felt to contain the terrifying projected aspects of themselves, or to be clinging and compulsive, due to a fear that losing the object means the annihilation of parts of themselves.

Segal and Bell also explain the role of envy in narcissistic disorders. Since the narcissist hates the very goodness of his or her objects, he or she is unable to acknowledge the objects' worth and separateness, and thus enviously attacks and devalues them. The child then feels persecuted because he or she has turned the objects into persecutors through the process of projection. Segal and Bell believe that ultimately, more normal object relations can only be achieved when the depressive position has been established. It is only in this position that there is a differentiation of self from object. This allows the object to be out of the subject's control and allows the person to negotiate the oedipal conflicts of the object's relations to other objects.

To grow and develop, there needs to be a sane awareness of the need for nourishment and dependence on an external object that is not under the control of the self. The narcissistic aspects of the person violently object to this reality, preferring to exist in a superior state of narcissistic self-sufficiency. There may become a hatred of life and an idealization of death, which is then viewed as a state in which the patient is free of need and frustration. The life and death instincts are seen as in constant conflict with the feelings of love and gratitude being pitted against feelings of hatred and envy.

EMOTIONAL HEALING AND INTEGRATION

In the context of this chapter, emotional healing is conceptualized as emotional growth and development, leading to a healthier state of mind. Although beyond the scope of this chapter, it is generally well accepted that psychological health also improves physical health and well-being. One avenue of potential healing comes from psychoanalysis, which, if successful, results in increased psychological integration and psychic change. Previously split off or repressed feelings may be experienced; relationships are more valued, and people are seen as separate, more whole people, toward whom we have ambivalent feelings. The individual grows in his or her capacity to take responsibility for loving and hating impulses, consistent with the Klein's depressive position. As Betty Joseph, another Kleinian analyst, states, "It means

developing beyond feelings of omnipotence and narcissistic illusions into a world of real people, towards whom guilt and loss can be experienced and overcome and inner confidence built up."[24] These are several of the kinds of changes that are seen as desirable for a healthier life.

In psychoanalysis, the analyst observes and interprets the shifts between the anxieties and defenses of the paranoid-schizoid position and the anxieties and defenses of the depressive position. These processes, previously unknown and unconscious to the patient, become conscious with the help of the analyst. The strengthening of the ego and the insight gained in analysis help the individual to work through conflicts, as opposed to denial or acting out. The analysis, over time, gradually leads to a decrease in splitting, allowing an internalization of a good object. "This mitigates the destructiveness of the early superego, helps the integration of the ego, and increases its strength."[25] This process parallels the growth of the child in early development, as there is a gradual withdrawal of projections and a more integrated self and object.[26]

Segal views narcissism as a result of envy and the death instincts, which attack healthy self-love and the life-giving relationships of others. In contrast, the life instinct creates the capacity to love the self, while at the same time loving others. In other words, self-love is not at the expense of others, nor is the love of others at the expense of the self. Analysis supports the life instinct, helping one tolerate feelings of dependency and love of the needed other.

In addition, there is a greater self-love and inner confidence of the good inside. Growth occurs as the patient acknowledges the internal conflict of the constructive and destructive impulses, including unwanted feelings of neediness, envy, and aggression. The patient begins to understand that his or her feelings are rooted in the inherent frustrations of the early maternal relationship and is able to take responsibility for his or her feelings and actions. Greater understanding and insight lead to a stronger capacity for integration, love, and gratitude. There is a hope that loving impulses and the will to live predominates over hatred and the destructive impulses.

Catalina Bronstein, in her book on Kleinian theory, reiterates Klein's emphasis on the importance of the integration of the destructive impulses with the more benign impulses.[27] In clinical work, this may be seen as the patient develops a less severe superego (conscience) and a greater capacity for repairing the damage done to his or her objects. The patient also feels more trust in his or her inner goodness, a stronger capacity to tolerate anxiety, more feelings of love and peace, and consequently, improved relationships with others.

These ideas pertaining to the healing power of the will to live hopefully overcoming the inner destructive impulses (the will to die) are viewed as quite consistent with Judeo-Christian teachings. Mature religions view envy

and omnipotence (pride) as destructive (evil), having negative consequences. Redemption and reparation are needed to repair the damage done to humankind. Spiritual healing is needed to transform the destructiveness into constructiveness.

Neville Symington makes a distinction between primitive religions, which are more concerned with external appearances and placative acts, and mature religions, which have as their aim an actual transformation of the mind and the heart. "Mature religion is concerned with how we should live and act toward our neighbor and toward ourselves."[28] Amos and Isaiah, Jewish prophets in the Old Testament, and Jesus of the New Testament proclaimed this as their central message. Transformation of the heart, leading to acts of goodness, social justice, and helping the oppressed, are valued over external rituals and sacrifices.

Symington views this goal of transformation as a shared goal of psychoanalysis and mature religion. The self-knowledge gained from psychoanalysis is viewed as inseparable from acts of virtue, particularly as one relates emotionally to others in close relationships. In psychoanalysis, this transformation occurs as a natural result of increased integration and decreased narcissism and omnipotence. In the Christian faith, compassion for others is one of the fruits of the divine spirit in us.[29]

NOTES

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2. Sigmund Freud (1949), *An Outline of Psychoanalysis*, Oxford: Norton.
3. Sigmund Freud (1915), Instincts and Their Vicissitudes, in *Collected Papers*, London: Hogarth Press, 82.
4. Sigmund Freud (1922), *Beyond the Pleasure Principle*, London: International Psycho-Analytical Press.
5. Freud, *Civilization.*
6. Bruno Bettelheim (1984), *Freud and Man's Soul*, New York: Random House.
7. Ibid., 108.
8. Ibid., 112.
9. Melanie Klein and Joan Riviere (1964), *Love, Hate and Reparation*, New York: Norton.
10. Melanie Klein (1989), Some Theoretical Conclusions Regarding the Emotional Life of the Infant, in Melanie Klein, Paula Heimann, Susan Isaacs, and Joan Riviere, eds., *Developments in Psychoanalysis*, London: Karnac Books.
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14. Segal, *Introduction*, 73.

15. Klein, "Some Theoretical Conclusions."

16. John Steiner (1993), *Psychic Retreats: Pathological Organisations in Psychotic, Neurotic and Borderline Patients*, London: Routledge.

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25. Hanna Segal (1983), Some Clinical Implications of Melanie Klein's Work: Emergence from Narcissism, *International Journal of Psycho-Analysis* 64, 270.

26. Hanna Segal (1982), Early Infantile Development as Reflected in the Psychoanalytical Process: Steps in Integration, *International Journal of Psycho-Analysis* 63, 15–22.

27. Catalina Bronstein (2001), *Kleinian Theory: A Contemporary Perspective*, London: Whurr.

28. Neville Symington (1998), *Emotion and Spirit*, London: Karnac Books, 147.

29. For a more complete discussion of recent thought regarding similarities and differences in psychoanalysis and religion, the reader is referred to David Black, *Psychoanalysis and Religion in the 21st Century: Competitors or Collaborators?* (London: Routledge, 2006). The contributors of this interesting and engaging book offer various perspectives on highly controversial issues, including the issue of religious truth, psychological truths in religious stories, the nature of religious experience, and the interplay between psychoanalysis and specific religious traditions.

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CHAPTER 15

Intercessory Prayer, Group Psychology, and Medical Healing

Judith L. Johnson and Nathan D. Butzen

For many Christians, prayers for healing and the sick emanate directly from the Bible. The Bible discusses many cases of divinely inspired healing (e.g., Matthew 15:29–31: New American Standard Version [NASV]),[1] and approximately 72 percent of Americans believe that praying to God can cure someone, even if science says the person does not stand a chance (Newsweek Poll 2003). Earlier, a 1996 Gallup poll found that 82 percent of Americans believe in the healing power of personal prayer and 77 percent agreed with the statement that God sometimes intervenes to cure people who have a serious illness (Poloma and Gallup 1991). Thus it is safe to say that prayer is biblically founded and believed to have a healing effect by a majority of Americans.

But what is prayer? Are there different types of prayer? Has prayer been scientifically proven to ameliorate physical problems and facilitate healing? What are some of the difficulties and limitations in the study of prayer and physical healing? This chapter is designed to address these questions and is organized in the following way. First, different types of prayer found in the research literature will be defined to provide the foundation for later discussion on prayer and healing. The chapter then moves on to outline selected empirical findings from both quantitative and qualitative research paradigms regarding prayer and physical healing. Finally, some of the difficulties associated with the study of prayer will be addressed. The chapter concludes with several summary statements regarding what we do know about prayer and physical healing, along with suggestions for future research.

Researchers in the area have identified up to 21 different types of prayer (McCullough and Larson 1999). Indeed, there is a prayer for physicians and

healers that first appeared in print in 1793. The Maimonides's daily prayer of a physician is said to have been written by a twelfth-century philosopher named Moses Maimonides and is often recited by newly graduated medical students. Later writers indicate that the prayer was likely written by Marcus Herz, who was a German physician and pupil of Immanual Kant. The Maimonides Prayer reads, in part, as follows:

> In Thine Eternal Providence Thou hast chosen me to watch over the life and health of Thy creatures. I am now about to apply myself to the duties of my profession. Support me, Almighty God, in these great labors that they may benefit mankind, for without Thy help not even the least thing will succeed.

More recently, and out of the 21 identified types of prayer, empirical studies have made a distinction between the broad categories of ritual, conversational, meditative, and petitionary prayer (Poloma and Gallup 1991). *Ritual prayer* is that kind of prayer commonly found at formal religious services and is often found in liturgical church services. *Conversational prayer* involves talking with God in a small group in a normal tone of voice and in an informal, conversational style. It is thought to produce a greater awareness of God's presence and be useful in teaching others how to pray. *Meditative prayer* has a variety of connotations; however, it is characterized by a relaxing and "being with God" that is thought to reduce expectations that people should be doing something in prayer. A common meditative prayer may start with relaxation and thankfulness, combined with openness to hearing God's word. When it comes to prayers directed toward healing, *petitionary prayers* are those that ask for divine intervention into sickness and life-threatening illnesses. It is primarily this type of prayer that is the focus of this chapter.

It is noteworthy that there are many terms used in the literature that refer to prayer-like behavior. These terms are not necessarily interchangeable. Terms such as *psychic healing*, *nonmedical healing*, *spiritual healing*, *miracle healing*, and *laying on of hands* have been used in published studies. Hence there is no agreement on language or on definitions when referring to prayer, prayer-like behavior, and physical healing.

In terms of healing, petitionary prayers may be further distinguished according to who is praying for whom or whether there is physical distance involved *(distant intercessory prayer)*. Furthermore, the frequency and intensity of prayer and formal versus private versions of prayer have not been adequately addressed as variables that may or may not be important (Krause 2000) in studying possible links between prayer and physical health. There has also been little empirical attention addressing other aspects of prayer such as how many people are praying, or their faith traditions, or whether the person being prayed for has a religious or nonreligious worldview.

Empirical study of prayer and physical health has yielded inconsistent findings. Indeed, some authors have questioned whether it is even appropriate, both theoretically and methodologically, to claim to study the effects of prayer (Masters 2005). In terms of inconsistent empirical findings, McCullough and Larson (1999) have suggested that failure to consistently relate frequency of prayer to measures of health likely results from methodological problems. Some common design problems include use of single-item measurement of constructs, different and uncontrolled sample characteristics, and choice of outcomes. Furthermore, authors typically have failed to include appropriate design or statistical control of extraneous variables such as baseline health, religious commitment, personality, and ethnicity (McCullough and Larson 1999). Because of this, many extant studies of the relation between prayer and health may not be comparable, and there is also an absence of replication of findings in the literature. Limitations of research designs and criticisms of this field of study will be more fully discussed subsequently.

EMPIRICAL FINDINGS

By far, the most researched form of prayer directed toward healing is distance intercessory prayer (IP), defined as prayer offered for the healing benefit of another person (Tlocynski and Fritzsch 2002). This prayer is directed toward the well-being of others and may be performed by strangers, family members, acquaintances, or service providers. The one being prayed for may or may not be aware of the prayer on his or her behalf. IP is directed toward God or a transcendent being, and the person praying believes that this may effect change and promote healing in another person.

From a historical perspective, perhaps one of the most famous studies of IP was published by Byrd in 1988, and this set the stage for a firestorm of controversy that continues to the present. In essence, this study used a randomized double-blind trial of 393 coronary care unit (CCU) patients, who were prayed for by Christian prayer groups (intercessors). The patients who were prayed for demonstrated fewer instances of congestive heart failure, pneumonia, and cardiopulmonary arrest. Furthermore, they exhibited less need for antibiotics, intubation, and diuretics. Byrd (1988) concluded that IP had a beneficial effect on CCU patients; however, later authors have noted that the Byrd (1988) study examined 29 outcome variables and only established six positive outcomes for the prayed-for group (Sloan, Bagiella, and Powell 2001). This fact, combined with the failure to control for multiple comparisons, calls into question whether IP truly had an effect on these six outcomes (Sloan, Bagiella, and Powell 2001).

Since this early study, there have been many empirical and quantitative studies reported in the research literature. As noted earlier, findings are

often contradictory. For example, Harris et al. (1999) reported on a randomized trial of distant IP on various outcomes with coronary care patients. These authors randomly assigned coronary care patients into two groups. The control group received the usual medical care, and the treatment group received distant prayer from interdenominational Christians for outcomes such as faster recovery or no complications. The group that received prayer demonstrated significantly better progress on such things as speed of recovery; however, Chibnall, Jeral, and Cerullo (2001) note that there have been similarly designed studies that have not produced conclusive findings.

For example, a long-awaited study that used state-of-the-art scientific procedures found no effect for IP (Benson et al. 2006). More specifically, distant IP had no effect on whether cardiac bypass surgery patients experienced complications. In this study, patients were randomly assigned into three groups: group 1 received IP after being told they may or may not receive prayer; group 2 did not receive IP, after being told they may or may not be prayed for; and group 3 received IP after being told they would receive it. The patients in group 2, the group not receiving prayer, fared slightly better than the patients in group 1, who did receive IP. A provocative finding was that patients in group 3, who knew they were being prayed for, fared the worst. Complications within 30 days of surgery occurred as follows: group 1, 52 percent; group 2, 51 percent; and group 3, 59 percent. One of the cardiologists who participated in this study observed that one possible reason that group 3 had a poorer outcome was that knowledge of being prayed for may have had an unexpected side effect of frightening the patients—hence accounting for greater complications; however, this remains to be seen. It is noteworthy that this particular study involved IP, not prayer for self or prayer from close friends and relatives.

Since single studies do vary by research design, participant sample, and procedures, it is often difficult to draw a singular conclusion to the question of whether IP affects healing. One way to attempt to summarize studies is through meta-analysis, which is when the researcher combines the findings from a number of studies by statistically integrating the various sets of results (Sprinthall 2007). Thus the researcher collects a number of studies focused on prayer and healing and reviews them. Statistics are used for estimating the effect size to predict the actual population effects. An effect size of zero indicates that the independent variable (IP) had no effect on the dependent variable (various healing outcomes such as need for surgery or time to recovery). An estimated effect size of 0.8 would indicate a very strong effect for IP on healing outcomes such as surgical complications.

In meta-analysis, which uses a number of different studies, an effect size of 0.8 would be very strong evidence for the effect of prayer on healing insofar as the effect of prayer has cut across different research settings, participants, and methods (Sprinthall, Schmutte, and Sirois 1990). Hence a better understanding

can be achieved regarding the effect of prayer on healing through use of meta-analysis. This is particularly the case when different studies yield different findings regarding this relationship.

There have been two recent meta-analyses on the effect of IP on healing outcomes. Masters, Spielmans, and Goodson (2006) included 14 studies in their meta-analysis. To be included, the studies (1) used IP as an intervention in either physical or mental health disorders, (2) were sufficiently empirical to provide data to be used in the meta-analysis, (3) used a control or comparison group, and (4) had participants who were blind as to whether they were in the IP versus the control group. Medical/healing outcomes ranged from events within cardiac patients (Aviles et al. 2001) to complications related to dialysis (Matthews, Conti, and Sireci 2001). Masters, Spielmans, and Goodson (2006) also examined whether certain aspects of study participants and particular research designs had an impact on overall findings. Specifically, the impact of types of participants, frequency and duration of prayer intervention, and assignment of participants to experimental conditions was assessed to establish whether these factors had an influence on IP and outcome variables.

The meta-analytic findings from the Masters, Spielmans, and Goodson (2006) study were not positive. These authors found no support for any effect of IP on medical/health outcomes. Furthermore, study design characteristics, such as types of participants and their assignment to groups and frequency of prayer, did not moderate or influence any potential effect of IP on outcome variables. They concluded, "There is no scientifically discernable effect for IP as assessed in controlled studies. Given that the IP literature lacks a theoretical or theological base and has failed to produce significant findings in controlled trials, we recommend that further resources not be allocated to this line of research" (Masters, Spielmans, and Goodson 2006, 21). Hence this meta-analytic review found such a notable lack of support for IP on influencing medical/health outcomes that the authors could find no justification for further study on the topic.

A more recent meta-analysis was a bit more positive. Hodge (2007) examined 17 studies on IP and health. Inclusion criteria for these studies were as follows: (1) studies used IP as an intervention that was (2) used with a population of clients or patients for healing. Furthermore, included studies were designed to examine the efficacy of the intervention (prayer) using double-blind randomized control trial methodology (RCT). In RCT, research participants and the researcher are kept blind, or uninformed, about who is receiving the IP. Participants are randomly assigned to either a prayed-for group (the experimental or treatment group) or a group not receiving prayer (the control group). Single case studies and studies using personal prayer (as opposed to IP) were excluded from Hodge's (2007) study. Across the 17 studies, outcomes varied from mortality, complications, and major events within

recovering cardiac bypass patients (Benson et al. 2006) to abstinence from alcohol abuse (Walker et al. 1997).

Hodge's (2007) meta-analysis indicated significant, but small effect sizes for IP across the 17 reviewed studies. Although this is generally a positive finding, it is interesting to briefly consider these studies when grouped into significant versus nonsignificant findings.

Five of the 17 studies did not find significant effects for IP on various healing outcomes with diverse medical ailments. Prayer was not found to have a significant effect on patients receiving treatment for cardiac bypass surgery (Benson et al. 2006), alcohol abuse (Walker et al. 1997), kidney dialysis (Matthews, Conti, and Sireci 2001), or psychiatric disorders (Mathai and Bourne 2004) and on patients receiving heart surgery (Seskevich et al. 2004).

Three of the 17 studies found significant effects for IP with cardiac patients (Byrd 1988; Harris et al. 1999; Furlow and O'Quinn 2002). Three additional studies found significant effects for IP with AIDS (Sicher et al. 1998), bloodstream infections (Leibovici 2001), and women receiving treatment for infertility (Cha and Wirth 2001). One study found significance for in-person IP but not for distance prayer for women with arthritis (Matthews, Marlowe, and MacNutt 2000).

Finally, five of the studies found a favorable trend for a positive effect of IP on health outcomes, despite lack of statistical significance. Three of these studies examined the effect of IP on cardiac patients with heart disease (Aviles et al. 2001) and those receiving heart surgery (Krucoff et al. 2001, 2005). Two older studies found a positive trend with patients with rheumatic disease (Joyce and Welldon 1965) and children with leukemia (Collipp 1969).

It is important to note that both the Masters, Spielmans, and Goodson (2006) and Hodge (2007) meta-analyses only included quantitative studies involving between-group comparisons and use of inferential statistics to gauge the effectiveness of IP. By its nature, meta-analysis does not include qualitative studies or single case studies, where an individual's subjective experiences regarding prayer and healing can be examined. This being noted, the quantitative research paradigm underlying techniques such as meta-analysis is inconclusive with respect to IP. Along these lines, Hodge concluded (2007, 185), "Indeed, perhaps the most certain result stemming from this study is the following: The findings are unlikely to satisfy either proponents or opponents of intercessory prayer."

QUALITATIVE FINDINGS

Although the above two meta-analytic studies exemplify quantitative work studying the effect of prayer on medical healing, it is important to note that nonexperimental studies on prayer generally provide favorable outcomes (Koenig, McCullough, and Larson 2001). Furthermore, qualitative

and anecdotal reports of prayer and healing abound. These studies range from single case studies to small group studies, with anecdotal reports from patients with a variety of diseases and medical problems. As noted earlier, there are compelling arguments from both theologic and scientific perspectives against the wisdom of subjecting prayer and healing to empirical study (Masters 2005). Hence first-person reports of healing provide a different perspective on the relation between prayer and healing.

Single case studies are reported in many different venues. For example, an Internet Google search for "prayer and healing" found close to 3 million hits, with articles ranging from newspaper reports to publications such as the *U.S. Catholic*. Anecdotal reports of healing are numerous and often dramatic. For example, there are reports of cancerous tumors that miraculously disappear and healing from terminal illnesses. Reports from both patients and their treating physicians are found.

It is of interest to note that there are entire books devoted to this subject, such as Dr. Larry Dossey's *Healing Words* (1993) and *Prayer Is Good Medicine* (1996). Since there are so many individual reports of (miraculous?) healing, for the purposes of this chapter, one exemplar will be described (Dubois 1997). Oncology nurse Cindy Thomas took a parish-based class on healing in 1984 and subsequently added prayer for her patients as she tended to them. She noted immediate results, when patients told her they felt better or slept better than before. She then started praying for guidance as she drove to work as well as individually praying for her patients. Some patients began to ask her to pray with them, and most slept peacefully through the night. Thomas tells a particularly compelling story about a young woman admitted to Providence Hospital in Everett, Washington, who had a deadly form of cancer in the lining of her heart. Thomas worked with the family and learned they had already experienced the tragic deaths of two children. According to a report,

> Thomas took the woman's hands and said, "You've had enough tragedy. It's time to pray for a miracle. You're due for one." At 1 A.M. the next morning, the pathologist called the nurses' station. He sounded confused. "This is a weird thing," he told Thomas. "Something made me go back to the lab and look at the slides (with the fluid specimen taken from the woman's heart lining). And they're completely negative." "That sounds like a miracle," Thomas said. "I, I guess it does," stammered the pathologist. An ultrasound the next morning confirmed the new test results. (Dubois 1997, 3)

Individual reports of healing through prayer are difficult to verify through the scientific method, which typically relies on larger group studies. They are also difficult to examine since they often may involve errors within the diagnostic or prognostic processes, and health professionals are understandably reluctant to divulge such information. Perhaps it is safe to say that many do believe in and report medical miracles and that this is sufficient to conclude

that they do occur. Indeed, valid criticisms of the scientific study of prayer and healing are so strong that qualitative reports may have more veracity than scientific studies.

DOCTRINAL DIFFERENCES IN BELIEFS ABOUT HEALING PRAYER

It is significant to note that within various Christian denominations, there are many different views on praying for the sick. Different faith traditions tend to argue that certain forms of prayer are more effective than others, and these discrepancies are often based on a doctrinal emphasis on specific scriptures. For example, some Christians believe that when dealing with sickness, it is important to use the prayer of Jesus for the will of God to be done that he modeled while praying in the garden of Gethsemane in Matthew 26:39–44. Other Christians may argue that when trying to alleviate sickness, it is important to follow Christ's sage advice that "this kind does not go out except by prayer and fasting" (Mt 17:21). Another group of Christians believes that Satan has significant power to cause sickness, and only by engaging in spiritual warfare can someone be healed of a serious illness.

Certain faith traditions believe that prayer for healing requires a certain level of faith to work, while others believe that "faith like a mustard seed" can accomplish miracles, including the healing of the sick (Lk 17:6). Some Christians believe that God heals who he will and has predestined all of the ways of a man, while others believe that it is possible to change God's mind on a number of issues that could encompass healing. With such a diversity of theological beliefs in regard to prayer for healing, it is clear that major difficulties would exist in standardizing the form and content of prayer that is offered for healing. There is not room to completely explain all of the theological implications encountered when trying to conduct this type of research, but these examples suffice to illustrate the diversity of prayer practices encountered when evaluating prayers for the sick in the Christian community.

Practical Problems with Prayer Research Based on Doctrinal Differences

Differences in Christian doctrines of praying for the sick could play out in scientific studies. For instance, consider an intercessor who believes that a so-called healer or someone with a gift of healing must touch or lay hands on a sick person so that he or she can be healed. If this person were asked to engage in distant IP, he or she would likely experience cognitive dissonance because this is not how the person has been taught that prayer is supposed to work—or at least be the most effective. The argument could be made that when asked to do distant IP for a research study, intercessors who practice

any different rituals for praying than those required by the study might doubt the efficacy of the prayer and thus not have faith that it will work.

Benson et al. (2006) note that many intercessors felt constrained by the limits or methodological controls that were used to ensure a good empirical design. Rather than pray from a distance, the intercessors were accustomed to having personal contact with the families and individuals for whom they were interceding. Perhaps this is a confound to the research, and typical in-person IP could be more beneficial to a person's health, if simply for the increased social support that patients receive during this time. In fact, this is consistent with the empirical study of Matthews, Marlowe, and MacNutt (2000) mentioned earlier, who found an effect for in-person prayer but not for distant IP. Of course, this type of finding would not prove that there is a God or that prayer works. However, in an indirect way, this conceivably shows that the way God's people function when a member of their faith group becomes sick does actually have beneficial health effects.

David Myers (2000), an author of introductory psychology textbooks and an outspoken critic of the empirical investigation of prayer, still commends a multiplicity of research studies on people of faith. Some of these studies have found that people with an active faith are healthier on a variety of health and mental health domains. Myers points out, for example, that after controlling for other pertinent variables, people of faith cope better with life events and report more happiness, while actually living longer as well. This latter finding remains salient even when healthy lifestyle choices are controlled for.

FURTHER CHALLENGES IN THE STUDY OF PRAYER AND HEALTH

As noted earlier, there have been critics of the theoretical, theological, and scientific fallacy of subjecting IP to empirical study. Masters (2005) provides an excellent treatise on this issue. Although the reader is referred to Masters' publication, it is worthwhile to briefly outline some of his concerns. First, many quantitative studies of IP and health are not properly grounded in theory, perhaps because there is no theory that is applicable or appropriate. If a group that is prayed for does better than one that is not (the control group), why would this be the case? Masters notes that God would not be preferential toward one group versus the other simply because an individual who needed healing ended up in a control group. Similarly, many studies do not examine whether those in the control group were prayed for by those close to them, which leads to another troubling theoretical conundrum: Why would prayer by a stranger (intercessor) be more effective than prayer from loved ones? Similarly, if IP does not have an effect, does this mean that God did not want to help or that prayer is useless? There are no theologically sound answers to these questions.

This lack of answers to theory-driven questions confounds the ability of the research to provide meaningful findings. Masters (2005) also notes that methodological choices of instruments used and samples chosen are similarly hampered by the lack of a cogent theory to guide the study of IP and health. The choice of outcome measures often lacks a rationale. Similarly, there is no theory to guide the choice of patient samples or of the intercessors themselves.

Masters (2005) presents convincing arguments that empirical studies are not appropriate to the study of IP and advocates that research resources be allocated to other, more appropriate religious/spiritual topics that can be studied scientifically. Masters concludes (2005, 268), "It is further argued that the experimental methods of science are based on important assumptions that render them ill-equipped to study divine intervention. As a result IP studies are seen as a distraction from more appropriate work that should be done in the areas of religion and health."

Along these lines, some writers have identified potential ethical problems associated with concluding that IP has a positive effect on health variables, when it actually does not, and strongly caution that prayer as an adjunct to medical interventions should not be prescribed. Although directed toward physicians, Sloan, Bagiella, and Powell (2001) note that issues of coercion, privacy, doing harm, and discrimination may arise should a physician suggest prayer or religious/spiritual activities to a patient, particularly in the absence of a sound body of research literature validating the effect of prayer on healing. The reader is referred to this work for a more in-depth discussion of these ethical considerations.

It is clear that some of the criticisms of the methodology for the studies that do exist on prayer and healing include significant problems operationalizing constructs like prayer, faith, and intercessory. It is also very difficult to reduce error variance among those praying. For instance, do some people pray longer than others? Are there some who pray outside of the appointed times to pray for the suffering victim? If someone has a gift of compassion and is in close communion with God, is it difficult for that person to stop "praying without ceasing"? Some researchers have made significant efforts to control for these factors, but these efforts beg the question whether a scripted prayer can truly be considered intercessory.

SUMMARY

Given the conclusions of the two meta-analyses provided by Masters, Spielmans, and Goodson (2006) and Hodge (2007), it is difficult to conclude that IP has an effect on healing. However, this conclusion must be tempered by the limitations of the quantitative research tradition and whether quantitative group studies of distant intercessory prayer are even an appropriate tool to study prayer, faith, and health. Furthermore, there is a lack of theological

rationale and integrated theory guiding the empirical research to date (Masters 2005). This lack may well explain the absence of sound and replicable empirical findings.

Perhaps researchers should listen to the advice of both Myers (2000) and Masters (2005), suggesting that it is time to put resources toward more measurable and clear domains than the effect of IP on health; however, this suggestion does not preclude the consideration of prayer as a predictive factor for many other positive outcomes. For instance, Butler, Stout, and Gardner (2002) found that married couples who prayed together had attitudes that enhanced conflict-resolution skills and more productive problem-solving skills. They suggest that further research should be conducted to determine whether prayer could be used as an effective intervention for religious couples in therapy. Case and McMinn (2001) found that spiritual practices, such as prayer, serve to mediate anxiety for religious psychologists, and these psychologists also perceive prayer to be one of the practices important to healthy functioning in their professional roles. So, clearly, it is possible to use empirical research to demonstrate that prayer, or at least the ritual of prayer, can have positive effects on mental and psychological health outcomes. The difference is the consideration of the ritual of prayer as an effective coping mechanism or practice within a constellation of other religious and spiritual variables versus an attempt to prove that the content of a prayer is directly responsible for an outcome such as better health. The latter approach approximates testing God and/or prayer to deliver a predetermined outcome, while the former allows for the act of prayer to be a helpful practice, without relying solely on the prayer's content.

Although IP has been the dominant area for research into prayer and health outcomes, it may well be that directions for future research should include more emphasis on qualitative research such as single case studies. This will not negate the criticisms put forth by several authors, particularly those criticisms aimed at the lack of theological or theoretical rationale. However, single case studies that are subjected to verification processes may continue to be descriptive of individual experiences and be heuristic for future researchers.

NOTE

1. Please note that all bible quotations in this chapter are taken from the New American Standard Version [NASV].

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Conclusion

J. Harold Ellens

The 15 chapters in this volume represent the careful work of 18 scholars, representing a number of different countries in Africa, North America, and Europe. This work has been made urgently necessary because of the fact that inadequate cooperation has been achieved, so far, between the contribution that the empirical sciences and the biblical and theological sciences can bring to bear on the study of miracles in the ancient world and in our own day. The exact sciences and the psychosocial sciences have tended to follow a trajectory of investigation in one direction, and the biblical and theological or spiritual investigations have tended along a different track. The former, understandably, follow the avenue of the hermeneutic of suspicion, while the latter, also understandably, hold themselves open to a hermeneutic of analytical but less suspicious and more affirming inquiry.

The virtual absence of pages or sections in professional and scientific journals devoted to religious, spiritual, or theological perspectives on issues dealing with paranormal human experiences is most unfortunate. The *Journal for Psychology and Christianity* and the *Journal for Psychology and Theology* are virtually alone in the American world as sophisticated, professional journals that regularly seek and publish empirical and clinical research on phenomena in the fields of psychosocial science and spirituality or religion. In the European community, the *Journal of Empirical Theology* has undertaken similar concerns. Division 36 of the American Psychological Association also deals continually with interests in these matters.

Of course, the function of peer-reviewed journals is to publish replicable research results. However, perhaps a section in each professional journal

should be devoted to reporting incidents of the paranormal so that a universe of discourse and a vehicle for discussion could be developed for taking such data into consideration. At present, such a move is not discussed in the scientific realm because no instrument is available for collecting and processing the data. It is important to create a culture of openness to the paranormal experiences humans have regularly so that the frequency of such events can be understood more clearly, recorded, described, named, categorized, and analyzed.

We may discover, if we create such instruments for raising our consciousness level and increasing our information base, that there are eight things that strike us with surprising urgency. First, we may discover that the incidents of paranormal events are more frequent, or should I say, more normal, than we think. Second, we may discover that they fit into specific patterns that can be categorized and even analyzed more readily than we have imagined. Third, creation of a vehicle for discussion of paranormal data may bring to the surface of our thought processes insights about the nature and sources of paranormal events that are currently ignored because we have not reduced our mystification about them, simply because we have not done the first and second steps above.

Fourth, we may find that the paranormal events are apparently more normal, in terms of the frequency and universality with which humans experience them, than are the normal. Fifth, we may discover that we can establish criteria for sorting out the real from the unreal in what we are now referring to as the mystifying paranormal. Sixth, we may discover that a solicitation of anecdotal reports will produce such a wealth of information as to give rise to an entirely new arena for productive research. If the spirit of God is communicating with our spirits by way of paranormal experiences, presumably it is because God thinks we can hear and interpret the content, making unmystifying sense of it if we study it carefully, just like we have the stuff of this world that we have mastered by our science. Seventh, not all truth is empirical data. A great deal of our understanding of the truth about this mundane world we know from phenomenological investigations and heuristic interpretations. These seem to be trustworthy instruments of research that are particularly suited to investigation of the reported experiences humans have of the paranormal. We should be able, by means of them, to create useful theories, data collections and management systems, hypotheses, and laws regarding the human experiences of the paranormal.

Eighth, if one assumes the existence of God and God's relationship with the material world, immediately, a great deal of data is evident within the worldview of that hypothesis, suggesting a good deal of available knowledge about God. Much of this is derived from the nature of the universe itself. Much of the evidence for God's nature and behavior, within that model of investigation, is replicable, predictable, testable, and the like. Why would we

not assume the same is true of the world of the paranormal, if we studied it thoroughly and systematically? We call it paranormal only because we have not yet discovered or created a framework of analysis by which its data can be collected and managed.

Some decades ago, a great deal was made of chaos theory and entropy in interpreting the unknown aspects of the material world, particularly in the field of astrophysics and cosmology. It turned out that we always think things just beyond our model and grasp are chaotic. That is only because we do not understand them, not because they are not coherent, lawful, and predictable. We think things just beyond our ken are chaotic because our paradigm is too limited to manage the data out there. Life is always a process of that kind of growth that requires constant expansion of our paradigms. When we cannot expand our paradigm to take in the next larger world we are discovering, whether because of our fear or blockheadedness, we shrink and wither, and our scientific systems go down.

At this very moment, we stand on a threshold demanding an expansion of our scientific paradigm to take in the data of the paranormal in a manner that it can be brought into new but coherent models of knowledge and understanding. In the first volume of this set, William Wilson said, in chapter 15, that part of the difficulty in studying the spiritual and related paranormal data lies in the fact that each event is intensely personal and unique. Each scientific exploration of that event must deal with an equation in which $n = 1$. That makes scientific extrapolations impossible. I suggest, however, that if we undertook the program I proposed earlier, we might well discover that n equals much more than 1, and in that case, we would be off and running along a trajectory that would teach us how to expand our present limited scientific paradigms to take in the additional real data. We have attempted to begin that enterprise with the first volume and continue in here in this second volume of careful scholarly investigation.

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About the Editor and Advisers

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