

Supernatural Selection  
HOW RELIGION EVOLVED

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# Introduction

## **The Origins of Religion**

This book seeks to answer a very straightforward question: How did religion come to be? A common way of addressing such a question is to go back to a time prior to the existence of the phenomenon you wish to explain and show how various factors operated to bring the phenomenon into existence. To understand how the Roman Empire came to be, for example, one might show how the pre-empire conditions of the ancient Mediterranean world made Rome's emergence possible or even inevitable. This book treats religion the same way. But this immediately raises a question: Can we truly envision a world prior to religion? As far back as we can trace human history, there has always been religion. Indeed, some believers regard religion as a divine gift transcending human history. Treating it as a consequence of the same haphazard stew of historical forces that drive human affairs seems to border on sacrilege.

But God moves in mysterious ways, and while there may or may not have been a time before God, there most certainly was a time before the idea of God (or gods). This time cannot be found in documented human history, however, but only in human evolutionary history (or prehistory). Thus, religion came to be because religion evolved. Though not intending sacrilege, this book does aim to provide a clearly specified, step-by-step

model of religion's evolutionary history. Using evidence from a wide range of disciplines, including archaeology, anthropology, primatology, psychology, and neuroscience, I sketch a model of religion's origins beginning about a half million years ago through the Upper Paleolithic (about 35,000 years ago). I believe that there is enough evidence to make the model plausible and that it is articulated with enough precision to allow for testing. Like anyone else, I have my biases, prejudices, and point of view, but I try hard to be neither an apologist for religion nor a religion-basher. The story itself is interesting enough and needs no agenda-pushing on my part. The model I present, however, does have important implications for how we view religion in the modern world and for addressing many of the controversies surrounding it. I do my best to present all of this in a clear, objective, and hopefully engaging way.

The evidence I present and the evolutionary scenario I outline lead to an important conclusion about the nature of religion: Religion is about relationships. In other words, religion is a way that humans relate to each other and to the world around them. Our ancestors half-devised and half-stumbled-upon this way of relating about 70,000 years ago because it offered significant survival and reproductive advantages. Thus, contrary to what most researchers believe, I strongly contend that religion is (or maybe was) an adaptation. It emerged as our ancestors' first health care system, and a critical part of that health care system was social support. This had important ramifications for group solidarity and cooperation. As we shall see, religiously bonded groups tend to be far more cohesive and competitive than "secular" ones.

I'm well aware that, for some folks, calling religion an adaptation amounts to nothing less than heresy. But I think the evidence warrants even stronger conclusions. For example, religion is vitally important to morality. No, religion is not the origin of morality, but religion does make us more moral (of course, here it is critically important to define "morality"). I will also make the case that religious ritual was critical in the evolution of our uniquely human cognitive endowment. To put it (too) simply, but (intentionally) provocatively: Religion made us human.

## **Models of Religion: Where Mine Fits In**

The model I present is unique in that it does not really "fit in" to the current framework of theories on religion. To understand this, however, we must first look at what types of theories are out there and how mine relates to them.

A theory is supposed to explain something. Germ theory explains why we get sick, and gravity explains why apples fall from trees. Why do we

have religion? That's a far more complicated question because religion itself is multifaceted. Thus, theoretical approaches to religion have typically carved off some aspect of religion—such as ritual behavior, supernatural beliefs, or the role of gods in addressing human concerns—and tailored the approach to specifically address that aspect. What we are left with then are models that primarily explain (or purport to explain), for example, why people engage in ritual, but do little to explain why people believe in miracles. These theoretical approaches can be categorized into five different types: (1) commitment theories, (2) cognitive theories, (3) ecological theories, (4) performance theories, and (5) experiential theories.<sup>1</sup>

*Commitment theories* are based on the idea that cooperation within human groups is individually beneficial (in that it provides access to resources that would be unavailable to a single person) but hard to establish (because cheating can always provide greater short-term gains). Religion helps to solve the cheating problem by virtue of its capacity to identify trustworthy people. The means by which religion identifies these people is “costly” signaling—where people signal their good intentions to others by using a sign that is hard to fake. The sign used must be “hard to fake” in order to be reliable. Otherwise, cheaters too will flash the sign frequently in order to try to deceive others and advance their own nefarious goals. In the animal world, for example, a male frog's deep-throated croak is a costly signal of robust health and good genes. This is so because making a loud resonating croak is difficult for such a tiny-bodied creature. Weak, sickly, immature, or otherwise compromised frogs simply can't croak with the same authority as healthy ones. Picky females listen carefully and only select “the real thing” for mates.

Likewise, religion forces people to demonstrate allegiance to irrational beliefs to show that they're fully committed to group norms of reliability, honesty, and reciprocity. Somewhat ironically, then, commitment to irrational beliefs serves a very rational and adaptive goal—securing individual benefits through enhanced group cooperation. In ancestral settings, only those who truly believed the gods were watching and keen to punish the unworthy would willingly subject themselves to painful rites of initiation. Those witnessing the rites could be fairly certain that the initiates were fully committed to the tribe's values and therefore would make good warriors, mates, and comrades. The analogous situation in modern settings might be found in instances where those who attend church regularly are believed to make better friends, business partners, and spouses.<sup>2</sup> Often this belief proves correct.

Not surprisingly, commitment theories primarily address the public expression of religion and the behaviors that mark religious group membership: rituals, initiation rites, moral directives, and behavioral

proscriptions. Important as these elements might be, commitment theories have nonetheless been criticized for leaving out the important mental aspects of religion. For example, anthropologist Scott Atran asks why it is that secular groups or ideologies can have behavioral obligations as demanding as religious ones, yet still fail to have as enduring an effect on individuals and cultures.<sup>3</sup> The answer to this, he argues, requires understanding the mind, and understanding why belief in supernatural beings and religious mythologies is so easily transmitted from mind to mind, generation to generation.

*Cognitive theories* are based on the idea that religious belief and behavior arise from the complex integration of a number of separate mental modules that evolved for nonreligious but often adaptive purposes. For example, an “agency detection module” is an evolved mental mechanism for identifying agents in the natural world. An agent is an organism whose behavior is driven by intentions, goals, and desires. Thus, if I watch a hawk swoop down suddenly toward the ground, my gut inclination is to assume that the bird did so because it was “hungry” and “wanted” to snatch a small rodent on the ground. Seeing agency where it doesn’t exist seems to be a common feature of the natural world—think of a cat attacking a wind-blown paper bag as if it were a mouse, or a human hearing haunting voices in the wind. In both cases the hyperactive agency detection system provides advantages by making sure the organism seizes every potential opportunity to obtain prey (in the case of the cat) or to avoid becoming one (as in the case of the human). Given the adaptiveness of overextension, our agency detection system leaves us prone to assuming that unexplainable natural events such as storms, floods, or drought are the result of the actions of supernatural agents.

Similarly, the “attachment system” promotes fitness by compelling infants to maintain close proximity to caregivers. When activated in conjunction with the hypervigilant agency detection system, it could compel us to form emotional attachments to perceived supernatural agents and to seek close proximity to them through prayer, ritual, or simply presence at a holy place (church, grave site, etc.), especially when in distress. Thus, in the cognitive view, religion is typically seen not as an adaptation in and of itself, but instead as a consequence of our cognitive/emotional attributes and the manner in which they interact.

As with commitment theories, cognitive theories explain important aspects of religion, but fail to provide a complete explanation. The major element they leave unaddressed is the motivational pull of religious belief and behavior. That religion calls upon a variety of mental systems hardly makes it unique; language, mathematical skills, and musical abilities can make the same claim. But it would be absurd to think of someone dying for

their math. Furthermore, while emotional attachments can be formed to a variety of imaginary agents (children with Santa Claus, or adults with soap opera characters), the enduring nature and level of commitment that characterizes peoples' attachment to God and other religious figures is unique. Cognitive approaches alone are unlikely to find an adequate explanation for this.<sup>4</sup>

*Ecological theories* explain religion as a method that helps humans manage the natural world. Although religious ritual seems to operate on an otherworldly plane, it often serves a very practical function. Anthropologist Roy Rappaport was one of the leading exponents of the ecological regulation approach to religion. His detailed analysis of the *kaiko* pig-feast ritual among the Tsembaga people of New Guinea showed that while the ostensible purpose of the Tsembaga's intermittent slaughtering of pigs was to offer sacrifice to their ancestors, the feast cycles also kept the pig population from outstripping the carrying capacity of the local environment. Additionally, the festival effectively distributed surplus wealth and facilitated trade. Similar examples have been noted in the Bali water temple system and the salmon fishing rituals of the Native Americans of the Upper Klamath River valley in Northern California.<sup>5</sup>

While ecological regulation theories have been important in certain anthropological circles, they have played only a limited role in most evolutionary approaches to religion. In part this is because these models rely heavily on group selection processes, which until very recently were out of favor among evolutionists. However, a form of group selection, called cultural group selection, has gained increasing legitimacy among many anthropologists, evolutionary biologists, and psychologists.<sup>6</sup> Cultural group selection argues that under certain conditions, groups with more effective norms for generating cooperation, motivating self-sacrifice, accessing and dispersing resources, and maintaining stability and cohesion out-competed groups with less effective norms. Thus, the ecologically effective rituals that we currently see would be the result of groups with more adaptive rituals having out-competed other groups with less adaptive ones over the course of evolutionary history.

Ecological theories address one aspect of religion—ritual. Even ecological theorists, however, would not claim that this represents the totality of religion's functions. Such things as counterintuitive beliefs or the role of supernatural agents in addressing existential concerns are not central features of an ecological approach. Thus, as with the commitment and cognitive approaches, the ecological approach fails to provide a complete explanation for religion.

*Performance theories* focus on rituals, ceremonies, and other community-based religious activities. These activities are thought to perform important

sociological functions, such as reaffirming a tribe's social structure, providing divine authority to its norms and traditions, and reviewing and transmitting its history. The fact that these functions typically reinforce a group's cultural infrastructure led renowned sociologist Emile Durkheim to conclude that religious practices often provided a means for society to deify itself by making its mores divinely sanctioned rather than just humanly constructed.<sup>7</sup>

Recent work on the role and function of religious ritual has demonstrated that these rituals are generally structured in a way that is similar to more mundane activities.<sup>8</sup> In other words, religious rituals follow the basic format of any action sequence where an agent performs an action (often using some instrument) on a patient. So, for example, a minister baptizing an infant is, in terms of the action being performed, not really different from a man washing a baby. An agent (man) performs an action (washing) using an instrument (water, washcloth) on a patient (baby). Why, then, is the baptism recognized as a special "religious" action (a ritual), while the other is seen as a run-of-the-mill event? Ritual theorists argue that the fundamental difference is simply that the religious action is presumed to involve a supernatural agent, while the ordinary action is not. This divine involvement marks it as extra-ordinary.

These extra-ordinary rituals can take two forms: agent-special, where a supernatural agent is acting upon ordinary patients; and patient-special, where ordinary agents are acting upon supernatural patients. Baptism is agent-special because it is assumed that God or some supernatural agent (acting through the minister or priest) is affecting the baby (babies being ordinary in everyone's eyes except, of course, the parents!). Rituals where ordinary agents (you and I) offer sacrifice or worship to a supernatural being are patient-special since it is believed that these offerings will affect the supernatural being in positive ways. Agent-special ceremonies are relatively infrequent, often highly emotional, and commonly associated with life-transforming events (baptisms, rites of initiation, funerals, etc.). Patient-special rituals are more frequent (weekly worship service) and more sedate.

There is something else interesting about these rituals and their effects—especially the more emotionally engaging, less frequent, agent-special ones. To the extent that these ceremonies have powerful, transformational effects on people, it is the presence of the supernatural that is usually given credited ("the Spirit was present"). Even nonbelievers may feel the effects of these rituals and experience some relatively lasting impact from them. In their case, however, the credit is attributed not to anything supernatural, but instead to some amorphous but perfectly natural "mental energy," "the spirit of the community," or "the power and



beauty of tradition.”<sup>9</sup> In many cases the difference between believers and nonbelievers here is probably not that great: Both might make reference to some “spirit” present in the ritual; they may only differ on the nature of the spirit.

Atran argues that in their emphasis on the sociological aspects of ritual and ceremony, performance theories neglect the individual mental aspects of religion. In other words, the decision-making/reasoning processes, motivations, and cognitive inferences that underlie an individual’s involvement in ritual play only a small role in most performance theories.<sup>10</sup>

*Experiential theories* concentrate on the religious experience itself. The classic example of this approach is found in psychologist William James’s groundbreaking work *The Varieties of Religious Experience*. For James, the foundational core of religion was the religious or mystical experience. Surveys suggest that somewhere between 35% to 47% of the population have had some form of intense spiritual experience or a closeness to a powerful spiritual force.<sup>11</sup> James identified a number of qualities common to the religious experience, including:

1. Ineffability—the fact that the mystical experience cannot be adequately described in words.
2. Noetic quality or enlightenment—the fact that while mystical experiences are profoundly emotional, they also provide deep insights and authoritative truths to the individual involved. Often these insights involve an awakening to the unity of all things and a deep sense of oneness with the divine.
3. Transience—the experiences are fleeting and temporary; they rarely last longer than a few moments.
4. Passivity—though mystical experiences can be facilitated through meditative practices, rituals, and other techniques, their actual occurrence is spontaneous and unpredictable. The person accepts the experience and cannot will it to occur.<sup>12</sup>

Since James’s work, other qualities such as realness and unusual percepts have been proposed as additional qualities.

In recent years, neuroscience has taken up the quest to understand the religious experience. Imaging techniques have been used to identify the specific brain areas involved in the religious experience. The studies have been diverse, often involving different meditative or prayerful practices across a range of religious traditions.<sup>13</sup> The brain areas involved have also varied, but a few commonalities appear to be present, especially in the frontal lobes and superior temporal sulcus/inferior parietal lobule. Neuroscientist Andrew Newberg’s results are particularly relevant to understanding mystical states. Using experienced Buddhist meditators, he

found that while areas of the frontal cortex increased in activation during the peak of the experience, areas of the parietal cortex reduced their activity below baseline levels. This reduction in parietal lobe activity may help to explain the sense of cosmic unity or loss of the subjective self that meditators often claim accompany intense mystical states: The parietal cortex is important for processing one's sense of bodily boundaries and orientation in three-dimensional space.

While neurotheology (as it is sometimes called) holds great promise in deepening our understanding of the role of the brain in religious states, it is still very much in its infancy, and interpreting its findings are difficult.<sup>14</sup> Moreover, it is still unclear how these findings can or will be integrated with those of the other approaches.

## The Proposal at Hand

Nearly half a century ago anthropologist Anthony Wallace argued that religion should be thought of not as a specific "thing" but rather as a collection of activities. Included among these activities were (1) addressing the supernatural, (2) offering/sacrificing, (3) exhorting (as in motivating conformity to divine codes), (4) avoiding (as in taboo), (5) manipulating psychological states, (6) reciting myths and moral codes, (7) becoming inspired, (8) dancing and singing, (9) imitating and simulating, (10) touching, (11) eating and drinking (of sacred or special food and drink), (12) congregating, and (13) placing symbolic objects.<sup>15</sup>

In many respects the current approach is consistent with this spirit. However, the model I propose contends that underlying all the actions that Wallace identifies is a common thread: relating. In varying degrees, all of Wallace's actions involve how members of a religious community relate to each other, to the physical world around them, and to the supernatural world they envision. Religion is a way of relating where supernatural agents are active players. Supernatural relationships act as mediating influences on people's other relationships. To better understand this, consider the following scenario:

A woman has one child—a daughter. Obviously, the two of them have a direct personal relationship. Sometime later, the woman adopts another girl. As might be expected, bringing a new, unrelated sibling into what had formerly been an exclusive mother-daughter relationship creates tensions. Intermittently, these tensions surface openly in arguments and conflicts between the "sisters." But to some degree, the sisters temper their anger toward each other because of their mutual love of their mother. On some occasions they clash, but on others they hold their tongues, find ways to

compromise, and even work constructively together—“for mom’s sake.” Even after their mother’s death, they continue to relate to each other with an eye toward what mother would have wanted. Their direct relationship is always mediated by a third party.

In this example, the mediating influence was generally positive. This is not always the case. The important point, however, is that the mediating influence has an effect. Now, replace “mother” with “God,” or “the ancestors,” or “the Virgin Mary.” Once humans could envision supernatural relationships, these relationships exerted a similar mediating effect on all their other relationships. Furthermore, it affected how they viewed the world around them and their relationship to it. The natural world was no longer simply inert matter, but a living gift of the creator, with its own spiritual and social reality.

So where does this religion-as-relationship approach fit in with the various models described earlier? The model proposed in this book is not intended as a competitor to or replacement for any of these approaches. Nor, however, does it fit neatly within any of them. Instead, the current model provides an overarching framework that incorporates cognitive, commitment, performance, experiential, and even ecological dimensions.

For example, commitment theories address the signs that religious groups use to identify members that can be trusted. Many species use hard-to-fake signs to indicate commitment to such things as territorial or offspring defense. Only humans, however, appear to be capable of signaling commitment to abstractions such as moral principles or cultural norms and obligations.<sup>16</sup> An individual’s relationship with other group members may depend on whether or not he or she is willing to display the necessary signs of commitment. For religious believers these signs are even more powerful since supernatural agents serve as witnesses to and potential enforcers of these commitments.

Cognitive approaches describe the evolved mental faculties that make envisioning supernatural relationships possible. For example, the hyperactive agency-detection model very likely provides one of the cognitive foundations on which ideas about supernatural agents are built. This system, in combination with the attachment system, provides the mental and emotional basis for forming close personal relationships with supernatural agents. Although often neglected in many cognitive approaches, another important component of the human cognitive system, episodic memory, very likely plays an important role in these emotional attachments as well. Episodic memory is our (possibly unique) ability to mentally travel back in time when recalling past personal events or project forward in time to envision future scenarios. It is this system that very likely provides the basis for our existential anxieties—our concern over the inevitability of suffering and death. This

concern can serve as a strong motivator for forming and maintaining supernatural attachments that may help to allay existential anxieties.

Performance theories explain the rituals and activities that individuals and communities use to interact with their gods. Ritual behaviors have a deep evolutionary history as a mechanism for regulating relationships. Rituals are especially useful when careful communication is required so that social interactions don't break down or degenerating into violence. For example, unless reassured with ritualized sounds or gestures, subordinate monkeys will flee from approaching dominants. The bowing and genuflecting common in many religious worship services are only a small step removed from the conciliatory gestures chimpanzees used to signal appeasement, subordination, or the desire for reconciliation.<sup>17</sup> Since they are built upon a deep evolutionary history of primate social rituals, it is unsurprising that religious rituals follow the same basic pattern as other, secular social activities or that they serve important social functions such as reinforcing group solidarity and transmitting cultural traditions. In the same way that subordinates ritualize their encounters with dominants in order to minimize the potential for dangerous miscommunication, humans ritualize their encounters with the gods to avoid offense.

Experiential theories examine the subjective experience of religious relationships. Encountering the divine during ritual, prayer, or contemplation is often described in relational terms—an engagement with the incomprehensible other. Theologian Rudolf Otto described this using the Latin phrase *mysterium tremendum et fascinans*—incomprehensible, fearsome, yet irresistibly attractive mystery. William James's work as well was dedicated to understanding this experience and the effect it had on people. Though religious experiences are described differently by individuals from different cultural backgrounds, one commonality appears to be that such experiences are relational.<sup>18</sup>

Ecological theories address how religion and ritual regulate a community's interaction with the natural world. At first blush it may seem that this approach falls outside of the relational realm. However, in animistic traditions, the natural world itself is understood as a social partner. For example, in many traditional societies, hunting is not just a subsistence activity but a sacred exchange between man and nature. The prey must be persuaded to give up its body to the hunter, and the hunter must perform proper rituals so the animal's spirit can be returned to the earth.<sup>19</sup>

Bringing nature into the human social sphere can serve as an effective mechanism for more sustainable, less destructive use of natural resources.<sup>20</sup> Thus, an assumption typically underlying the ecological approach is that one's community is in a relationship with and owes a "social" debt to a spirituality-imbued natural world.

## The Diversity of Gods and Religion

Viewing religion as relationship helps make sense of the wide array of gods, spirits, and other supernatural agents that populate most religions, as well as the wide diversity of practices that can be considered “religious.” A popular notion about the origin of religion is that it emerged as a means of ameliorating our anxieties over death and suffering. A serious problem with this view is that throughout our history the gods have been an awfully varied lot—and not always comforting. However, if religion is a supernatural extension of social life, then this diversity is to be expected. The supernatural social world, like the human social world, will run the gamut of characters—some attractive and alluring, some boorish and tedious, and others nothing short of repulsive. While some gods provide solace, others—especially those who deal in death—may be anything but comforting.

Anubis—one of the Egyptian gods of the dead—was portrayed as a jackal-headed man the color of rotting flesh. Anubis’s counterpart among the Mayans of Mesoamerica was Ah Puch, god of the underworld. Ah Puch had sockets but no eyes and a decomposing, skeletal body that smelled as bad as it looked. It’s hard to imagine how anyone could look forward to meeting these characters. As if the gods of death weren’t disheartening enough, the ancient view of the afterlife was often equally depressing. In book 11 of the *Odyssey*, for example, Homer has the dead Achilles lamenting to Odysseus: “Say not a word in death’s favor; I would rather be a paid servant in a poor man’s house . . . than king of kings among the dead.”

Even gods with no connection to death could be nasty characters. The Sumerian goddess Inanna (called Ishtar in Babylon) was an assertively sexual goddess whose violent, unpredictable emotions were thought to produce floods, windstorms, and other natural disasters. Her volatility was also associated with the mayhem of battle. The witches and spirits that continually harangue the Fang, a traditional people living in Cameroon, are known to inhabit bodies, induce sickness, cause accidents, and just generally sow confusion and misery. As if the natural world alone was not sufficiently demoralizing, our ancestors seemed compelled to augment it with supernatural forces designed to intensify its gloom. If religion’s primary purpose was comfort against the vagaries of life, we could have wished for much better than the gods and myths we inherited.

What about religious practices? It might seem that religion-as-relationship would only apply to those aspects of religion that are communal—public worship services, rites of passage, and shared myths and doctrines. This, however, would be a mistake. A fundamental premise of this book is that religion represents a “supernaturalization” of human social life. At a certain point in our evolutionary, humans added a

supernatural layer to their social world. Relations with the supernatural have both public and private aspects, just as human relationships do. Many religious activities that on the surface seem non- or even antisocial can be understood as vehicles by which devotees deepen their relationship with supernatural agents or forces. For example, meditation, monastic isolation, fasting, or other forms of self-inflicted suffering may all be ways of enhancing an individual's perceived closeness to a deity or cosmic force. Similarly, moral prescriptions and proscriptions can help to both define and solidify an earthly community and fortify that community's relationship to its deity, as well as the relationships of individual community members to that deity.

Finally, just as human relationships are characterized by certain symbols (a wedding ring, a cherished heirloom, a love letter) and "sacred" places (a shared home, the location of a first date, a grave site), so are supernatural relationships. A contemplative garden, a statue, and prayer beads (to name just a few things) may all serve to help people draw nearer to a supernatural agent. While religion is primarily relational, that does not mean it is restricted to what is commonly seen as "social." To the religious person, isolation from others may still be "social" in that it enhances one's connection with a god or spirit. Just as lovers often sneak away from a party for time alone, the religious person often sneaks away from society for private rituals with his or her spiritual mate.

## Relationships and Reason

Understanding religion as a way of relating also casts the question of the "reasonableness" of religion into a different light. For most scientists and philosophers, religion is inherently unreasonable because it espouses the supernatural. Since there is no evidence for the supernatural, only by abandoning reason can one be religious. Cornell biologist William Provine expressed this attitude succinctly by claiming that to be religious one had to "check one's brain at the church house door."<sup>21</sup> But in the realm of relationships, this logic gets turned on its head. For humans, relationships are essential, yet there is something inherently "unreasonable" about them. Moreover, trying to impose rationality upon them only serves to make their existence nearly impossible. In his essay "The Will to Believe," William James attempted to unravel this paradox and defend the reasonableness of religious faith. To do this, James placed religious belief within the broader context of human relationships and the necessity of *relational trust*:

Turn now from these wide questions of good to a certain class of questions of fact, questions concerning personal relations, states of mind

between one man and another. *Do you like me or not?*—for example. Whether you do or not depends, in countless instances, on whether I meet you half-way, am willing to assume that you must like me, and show you trust and expectation. The previous faith on my part in your liking's existence is in such cases what makes your liking come. But if I stand aloof, and refuse to budge an inch until I have objective evidence, until you shall have done something apt, as the absolutists say, *ad extorquendum assensum meum*, ten to one your liking never comes.<sup>22</sup>

James's rather flowery turn-of-the-century language can be difficult for modern readers to follow, but his point is a simple one—if we want friends, we have to be willing to trust them. To demand up-front evidence of someone's trustworthiness is to risk insulting the very person we wish to call "friend." So we have to take our chances, put ourselves at risk, or forever be a lonely island unto ourselves. Thus, for James, it is rational to take this risk since the rewards of personal relationships far outweigh the intellectual compromise required to set things in motion. James then extends this logic to religion:

To take a trivial illustration: just as a man who in a company of gentlemen made no advances, asked a warrant for every concession, and believed no one's word without proof, would cut himself off by such churlishness from all the social rewards that a more trusting spirit would earn,—so here, one who should shut himself up in snarling logicity and try to make the gods extort his recognition willy-nilly, or not get it at all, might cut himself off forever from his only opportunity of making the gods' acquaintance.<sup>23</sup>

Just as we are quite reasonable in trusting (i.e., putting faith in) the goodwill of others whom we wish to call "friends," the gods await our befriending as well—if only we would extend to them the same trusting spirit. What separates the religious person from the skeptic is this "relational risk-taking." The religious person has extended the hand of trusting friendship to the gods. The skeptic withholds the hand until satisfactory evidence is forthcoming that such a relationship is even possible. The critical difference is relational—the religious person establishes the "spiritual" relationship, the skeptic does not, and this makes all the difference.

James is not alone in claiming that at its core, religion is relational. The famous Jewish philosopher Martin Buber argued similarly—that the essence of biblical faith was the trusting I-thou (as opposed to I-it) encounter between humans and God. In other words, God-human interaction has a natural intersubjective character, not an alien or mechanized one. Contemporary Catholic theologian John Haught goes so far as to argue that trust—trusting in God, in the intelligibility of the universe, in the inherent meaningfulness of existence, in our capacity to find

truth—is simply another term that the Bible uses for faith. Some may find these arguments convincing, and others may not.<sup>24</sup> What is clear from them, however, is that when thoughtful people seek to understand whatever logic there might be behind religious faith, they inevitably turn to the relational realm.

## Relationships and Evidence

Why relationships? The answer, I believe, is that when it comes to religion, the relational realm provides something that science cannot: evidence for religion's "reality." Take, for example, the very notion of God. It has been argued that one quality that God must surely possess is that of being greater than humans. God must be greater than I am. Thus, God must *at least* be a personal subjective consciousness, otherwise, God is less than I am and therefore not worthy of being called "God."<sup>25</sup>

But what evidence can verify the existence of another's subjective consciousness? There can be no conclusive empirical test for consciousness, because consciousness by definition eludes the objective, third-person methodology of science. This, in fact, is a long-standing philosophical conundrum called "the problem of other minds." How can I truly know that you are another conscious agent? There is no conclusive test to verify that you are a self-aware, experiencing agent and not a zombie designed to behave in exactly the same way as a real human, but with no actual inner life.<sup>26</sup>

Yet I take something of a minor leap of faith and assume you to be at least as conscious and self-aware as I am. This leap is noteworthy both for the fact that I do it so effortlessly and for the fact that when I do it my life is infinitely enriched by the intellectual, emotional, and social benefits that accrue from relationships with other (presumably) conscious beings. But if scientific evidence cannot convincingly verify the presence of consciousness, then what can? The best we can do is to relate to another being and see if its relational behavior reminds us of ourselves. If the actions, reactions, and expressions I observe in you are the same ones that arise in me because of my conscious mental states, then I must assume that you experience those states as well. Relationships, not science, provide the relevant evidence (such as it is) for the existence of other minds.

Thus, just as none of us can *know* as a scientific fact that others are conscious beings, we cannot know that there is a suprahuman consciousness out there. This inconclusiveness breeds doubt in the skeptic. But for the believer, the mind of God is found in their relationships with others, with life, and with a world that they see as bathed in divine mystery. It's



simply another of those unscientific leaps of faith that litter the ground on which relationships, religion, and human life itself are built.

If relationships provide the evidence for religion's validity, then we are indeed in a quandary over the issue of God's existence. Whether God exists or not falls outside of the objective realm. It is subjective—based on people's relational experience. As such, it is an unsolvable problem. Chapter 1 takes up this unsolvable problem and explores its implications in more detail.

# 1

## Natural Relationships and Supernatural Relationships

### **Honoring the Dead**

In April 2008, the phone rang at the home of Howard Enoch III. It was the U.S. Army. Howard's father would finally be coming home. Sixty-three years earlier, in the waning days of World War II, Second Lieutenant Howard "Cliff" Enoch Jr. climbed into his P-51D Mustang fighter for a mission over Halle, Germany. He never returned. When the Iron Curtain enveloped the site where Enoch's plane went down, the army declared his remains "unrecoverable." But dedicated members of the U.S. Army's Joint POW/MIA Accounting Command refused to give up on Cliff Enoch. In 2004, their review of crash sites in the former East Germany revealed suspicious plane fragments near the village of Doberschutz. Two years later, an onsite excavation team found what appeared to be human remains. The remains were flown to a laboratory in Hawaii for DNA analysis while the army continued to study the crash-site evidence. In the end it led to the phone call—and a burial with full honors at Arlington National Cemetery.

"Remarkable" is how Howard Enoch described the events of that spring. "I will now have a place . . . to know where he is . . . to be close to him," he said. "Before this, I always thought of my father as a young man, sitting in a beautiful pasture in Germany, waiting for someone to bring him home—and that is what happened." Commenting on the extraordinary

effort the military expended in retrieving and identifying the remains, army spokesman Johnnie Webb explained that it was important for people to know that the “creed and tradition” in the military is to “leave no one behind.” The military, he said, would always do their utmost to “honor that promise.”<sup>1</sup>

A bittersweet story. But most would agree that it ends as it should. It is right and good that the brave young soldier be returned to his home, his country, his family. The human desire to keep loved ones near, even in death, hardly needs an explanation or justification. Yet very little of this story can be defended as *reasonable*. Cold logic would correctly conclude that it is of no consequence where Cliff Enoch’s remains are buried, or even whether they are ever conclusively identified. After 60 years there’s no doubt that he is dead. His loved ones have gone on with their lives, and the skeletal remnants care nothing about the ground under which they lie. From a practical standpoint, a backyard cross is as good a remembrance place for the downed pilot as a cemetery plot. And wouldn’t the army’s limited resources be better spent on increased health and education benefits for veterans or better housing for military families, rather than on the retrieval of a few old bones?

Howard Enoch was welcoming back a man whom he had never known. Now 63 years old, he was born after his father Cliff was shot down. The fallen hero was but a picture on the wall, a story only rarely broached, more a myth and a spirit than a man. But is it fair to say that Howard and this spirit were strangers to each other? Was there no relationship here at all? The fact that it just *feels* wrong—cruel, even—to simply let Cliff Enoch’s bones lie anonymously in some far-off foreign land suggests that the answer is no. And if it is no, then this might offer some justification for the military’s extraordinary efforts to retrieve those bones. After all, if you’re going to convince people to risk their lives for their country, then sometimes that country must go to excessive lengths to not “leave them behind.” None of this is likely to pass a rigorous rational examination. But doing right in life sometimes means that reason cannot be the sole light by which your moral compass is set.

Human life is not a science. The good life isn’t a theory to be operationalized, tested, and replicated before it is deemed useful. For better or worse, life must be lived, here and now; and what is valuable about it we often must discern, on the fly, as best we can. The hard-nosed rationality so valued in scientific circles seems oddly incompetent when facing the human complications of real life.

This observation is by no means novel. Decades ago, the economist Robert Frank recognized that our passions often thwarted our best attempts at being perfectly rational economic agents.<sup>2</sup> Oddly, this was often a good

thing. Dispassionate logic could easily prevent us from making the personal commitments necessary to take advantage of some of life's greatest opportunities. Success in life often entails some seemingly irrational risks. We make promises, form deep emotional attachments, and put faith in family, friends, and neighbors based on partial and ambiguous data—data that would never pass muster in a scientific journal. But the rigors demanded by good science—empirical testing, adequate controls, reliable measures, falsifiable conditions, replication—come off as nothing short of insulting when imposed upon a potential friend, date, or marriage partner. We aren't interested in someone who can't trust us, so we have to risk trusting others.

This unscientific risk-taking, or what Frank called "the commitment problem," is the very thing that makes life human. At some point we just have to dive in, follow our guts, and experience what life and human relationships have to offer. Religion is a lot like that. In this book, I shall argue that religion is all about how we experience life and, most especially, how we experience relationships. Just as we don't use science when choosing our friends or spouse, very few of us allow science to determine whether or not we are religious. While that bit of news may be reassuring to some, it is downright maddening to others.

## The Story I Shall Tell

This book is about religion—what it is, where it came from, and, most critically, how and why it evolved. I attempt (with some success, I hope) to offer a coherent narrative about the evolution of religion. In outline form, the narrative goes as follows: By at least 500,000 years ago, our hominin<sup>3</sup> ancestors had the conscious motor control to engage in coordinated group rituals of social bonding—in other words, they could sing and dance together. Around 100,000 years ago, our ancestors (*Homo sapiens sapiens*, who shall also go by the title "anatomically modern humans," or AMH) made their first foray out of their home continent of Africa into the Levant region of the Middle East—what is now Lebanon, Israel, and parts of Sinai. Cold conditions and advancing Neanderthals, however, quickly chased them back to Africa.

Then, quite possibly, a calamity of unimaginable proportions struck: About 70,000 years ago, a massive volcanic eruption in a far-off land brought on a global ecological crisis. This crisis only accentuated the rapid climate changes and accompanying resource shortages that were common during this period. All this took its toll—humans nearly went extinct. The few who endured were forced to create new strategies for survival, which

included establishing unprecedented levels of intergroup cooperation. Religious rituals were central to these new strategies. As social life became increasingly complex, human imagination expanded. From out of this enhanced imaginative capacity, especially childhood imaginative capacity, the idea of the supernatural was born. The supernatural added a new spiritual dimension to social life.

The supernatural “layer” that our ancestors added to their social world was filled with ever-vigilant gods, spirits, and ancestors, who monitored their people for strict adherence to tradition and scrupulous avoidance of taboo. But these spirits could be inspiring and comforting as well as menacing—our ancestors often formed close emotional attachments to them just as modern religious people do with God, Jesus, patron saints, local deities, and other supernatural agents. By adding the supernatural to their social world (i.e., by “supernaturalizing” their social lives), our ancestors created strongly cohesive and formidably competitive social groups. Starting about 60,000 years ago, they broke out of Africa once again and began a worldwide expansion to the far corners of the globe. In the process, they displaced all other hominins and eventually became the earth’s sole hominin species. Wherever they went, they took their religion—their supernatural attachments—with them.

## **What Is Religion—Really?**

Over the years, anthropologists and sociologists have struggled mightily to define exactly what religion is. My contention is that at its heart, religion is a certain type of relationship that people (and only people) have—a relationship with God, gods, spirits, supernatural beings, deceased ancestors, and the like. This is what I mean when I say religion represents a supernaturalizing of social life.

Somewhere in our evolutionary past, our ancestors’ cognitive faculties became such that they were capable of envisioning their social world as including more than just family, friends, and fellow-group mates who happened to be immediately, physically present. This envisioning began with just a vague sense of a healing power that they could contact and direct using ritual. Over time this sense broadened and elaborated. They envisioned an entire social world that extended both “upward,” to include dead ancestors, spirits, gods, and other supernatural beings, and “downward,” to include nonhuman wild and domesticated animals, ultimately including pets. If we think of the immediate, human social world as horizontal, then we can think of this extension of the social world as vertical, reaching up to the sky for spirits and gods, as well as down to the

ground for four-legged friends and other creepy-crawly things. This supernaturalizing was not just a quantitative “add-on” to social life; it changed the very nature of people’s human relationships. Friends, family, fellow-group mates, and the natural world itself had a spiritual nature as well as an earthly nature that had to be considered in our relationships with them.

Once religion is understood as an extension of the social world, a number of other issues fall into place. For example, the all too easily misunderstood and often misrepresented role of religion in morality becomes clear (or at least clearer). Religion is not the origin of morality—social life is—but it is hardly irrelevant to morality since religion extends social life in important ways. Furthermore, religion and ritual are intricately intertwined because ritual is essential to social life, and if religion extends social life, then logically it must extend ritual as well. The anthropomorphic (humanlike) yet superhumanly powerful nature of gods and spirits makes perfect sense within this framework. We need spiritual beings to whom we can relate (thus anthropomorphism), but we also need some reason to desire such a relationship (thus power, accessible through ritual). The fact that religion seems to involve both reason and emotion is easily understood within this framework as well since social life requires both.

Finally, understanding religion as relational helps to explain why religious beliefs can be so tenacious even in the face of what seems to be contradictory evidence. Objective evidence and meticulous logic have only limited impact on religious beliefs because a significant part of the evidence for the belief is the subjective experience of the relationship itself. When it comes to religion, *experience is the evidence*. Understanding this may provide a more constructive perspective from which to approach the recent God wars that have broken out. Seeing religion as relationship is certainly not an antidote to the venom that has been spewed of late over religion and its role in society. Still, recognizing this can serve to diffuse some of the bitterness driving the recent God wars, and may lead to more productive exchanges between the devout and secular.

## The God Wars

Religion is a hot topic. In recent years an onslaught of books exploring the origins of religion has hit the market. The issue has been addressed from nearly every possible angle, including archaeological, anthropological, primatological, cognitive, and neuroscientific.<sup>4</sup> The upsurge in scientific interest in religion coincides with (or possibly results from) religion’s increasing salience in global politics. For millions worldwide, religion

provides strength, solace, and a powerful sense of community; but for others, religion's prominence in many of the world's most vexing and divisive issues is deeply troubling.

In America especially, the appropriate role of religion in education, jurisprudence, and social policy has been a source of ongoing and sometimes acrimonious debate. It is hardly surprising, then, that a few have found this an opportune time to foment the next chapter of history's God wars. For some scholars, the only effective response to the threat of creationism and militant fundamentalism is a more aggressive atheism. This atheism finds no virtue in peaceful coexistence with moderate religion. Instead, it seeks to stamp out all religion. This atheism has itself been harshly critiqued.<sup>5</sup>

This state of affairs is rich in irony. While the bickering over God has grown ever more acrid, science has made astounding progress on religion. The good news is that we know more about religion today than ever before. The bad news is that this knowledge has done little to help us deal with it reasonably. One book is unlikely to dramatically shift this state of affairs. However, if my conclusion that at its core religion represents a "supernaturalizing" of social life is more or less correct, then this may give us a better perspective from which to approach public conflicts over religion. Relationships, after all, are transformational. The world often looks very different from "inside" a relationship than from "outside" it.

Since religion is fundamentally relational, you can't simply talk people out of it using objective, third-person evidence. Relationships are experienced subjectively, in the first person, and it is this subjective, first-person experience that actually constitutes the evidence for the relationship. Furthermore, it is from within the context of the relationship that people define key terms such as "God," "religion," and "evidence." Often the bottom line is that you can't prove to somebody that they don't have a relationship. If their experience is of having a relationship, then it is that experience itself that is the evidence for the existence of the relationship (and therefore the relationship partner). Likewise, you can't impose a relationship on someone who is perfectly content as is. Thus, we are often left with opposing camps that have a hard time talking to each other.

### *Relationship as Transformation*

As we get to know someone more intimately, we empathize with them more deeply. Increasingly we understand the world from their point of view and appreciate how their motivations and values play into their actions. Sometimes this experience can be life-changing, offering us insights from another that expand and enrich the way we see ourselves and approach the world. A beloved teacher, a demanding coach, an unremitting

rival, an unlikely friend, a long-sought lover—whose life at some point has not been transformed by one of these? Relationships, in fact, are the primary means by which we grow and our lives take new directions. When this happens, it can often be difficult to communicate with those who have not had a comparable experience. They just don't seem to get it. To highlight this, allow me to spin a bit of a fictional but not implausible tale:

Eddie and Cruiser have been friends since childhood. The two of them and their circle of buddies have been hanging around together for as long as anyone can remember. But lately things have changed. Cruiser ("the Cruise," as he is known) has been spending far more time with his new girlfriend, Betty-Lou, than with his old chums. Cruiser has had many girlfriends before (as have all the other boys), but there's something about Betty-Lou that's different. She's a classy lady—a far step up in quality compared to Cruiser's past romantic partners. The Cruise may very well have found his first real love.

Though he has been trying hard to keep up appearances, recently Cruiser has been entertaining thoughts about how juvenile Eddie and the rest of them seem: Do they really think they can spend the rest of their lives just hanging around, playing cards and shooting pool? Is there anything really satisfying or truly fun about that stuff? And then there was that incident last Thursday night at Benny's weekly Texas Hold'em party. The boys have bummed money off Cruiser before, but \$50 seemed a bit excessive. Cruiser was planning on a special night out with Betty-Lou, and that cash was essential. Why couldn't anyone understand that? Don't any of them really care about what makes Cruiser happy? Have all of them been hanging around low-class women so long that they can't see the real thing when it comes along?

Finally, at the behest of his buddies, Eddie confronts Cruiser about his sorry disposition of late. Not surprisingly, the whole encounter goes badly—the two had to be separated to avoid fisticuffs. They couldn't even talk to each other anymore. Now this is hardly the first case of longtime buddies breaking up because of someone's girlfriend (the Beatles, anyone?). But why does it happen? I would suggest that a key factor here is that *relationships radically change perspectives*.

As well-intentioned as Eddie might have been, he was probably ill-advised to confront Cruiser. A meeting of minds between the two was bound to be a challenge, given that each is coming from a very different relational perspective. Cruiser is "within" a relationship that has transformed his entire view of life. Meanwhile, Eddie, standing outside of the relationship, sees Cruiser as having changed only for the worse. Stepping back and analyzing the situation reveals exactly what it is that Eddie and Cruiser now see so differently and how that sabotages their communication.



The first problem is definitional. Constructive communication requires that the parties understand terms in approximately the same way. One of the crucial issues facing Eddie and Cruiser is that of happiness or “having fun.” Since Cruiser has been with Betty-Lou, Eddie has seen him as painfully unhappy—how can he possibly be having any fun when he’s not with the boys anymore? Isn’t that what fun has always been for the two of them? For Cruiser, however, fun has become something very different. Eddie doesn’t know what real fun means to Cruiser anymore primarily because of the paucity of decent women in his life. They have different definitions of fun that are determined by the types of relationships they have with women. Fun with their usual cadre of female companions means one thing (Eddie understands this). Fun with a high-quality woman means something else entirely—something that Eddie is clueless about and that Cruiser himself only came to understand since his Betty-Lou revelation. Maybe things would have gone differently between Eddie and Cruiser if someone had stopped them right there and forced them to come up with a common definition of fun. Likewise, if someone backed the God warriors up a step or two we might find that much of their enmity stems from vastly different definitions for key terms, which themselves might be based in widely different subjective experiences of life and relationships.

Because Eddie and Cruiser define key terms differently, they have widely varying interpretations of common experiences. For example, both can agree that Cruiser has changed. But Eddie experiences Cruiser’s change as a plunge into an emotional malaise, while Cruiser sees it as maturation. For Eddie, Cruiser’s unprecedented conflict over money at the weekly card game stands as evidence of Cruiser’s despondent state. Cruiser’s experience of that same event was quite different—it provides evidence of a new-found concern over the real value of money. At bottom, Eddie and Cruiser have diametrically opposing views about Cruiser’s relationship with Betty-Lou. From Eddie’s third-person perspective the relationship has been a disaster for Cruiser. But from Cruiser’s first-person perspective it has been the best thing that ever happened to him. Neither can convince the other of his position, because for each, it is the experience itself that constitutes the evidence for the conclusions he has drawn.

Consider another relational example: people and their pets. If someone could show you beyond any scientific doubt that your pet does not understand a word you say, has no real notion of what you’re thinking, and is entirely incapable of offering you the same kind of love, concern, and compassion that you bestow upon it, would it make any difference in the way you relate to your pet? If you knew intellectually that your pet simply could not have the kind of relationship with you that you are convinced you have with it, would it matter? Would you go home and suddenly stop

talking to or playing with your beloved pet because some pipe-toting PhD somewhere told you it's a deceptively lopsided affair? The answer, of course, is no. We academics have been trying to convince people of the big "pet lie" for decades now, and it has had absolutely no impact. People (myself included) continue to enjoy their pets just as much as before the big "pet lie" was revealed.

Why do we so readily fall for it? Once again, it is because of the experience we have in the relationship. The bodily reactions and facial expressions of most pets match what would be expected from a creature that experiences the mental states and emotions with which humans are familiar. Or, to put it more simply, it sure seems as if Fido likes me, understands me, and enjoys my company. Furthermore, most people like the experiential consequences of their pet relationships (i.e., they enjoy caring for their pets, they have fun with them, their pets bring them companionship and happiness, etc.). The argument that pet owners are weak-minded, delusional imbeciles can easily be countered by empirical studies showing that pet ownership can have positive health benefits.<sup>6</sup> If science cannot break people of false notions about pets, a topic on which it can make reasonably definitive statements, then what chance does it have when making pronouncements about the supernatural, a topic on which it cannot?

### *The View from Outside*

The God wars are plagued by both definitional quagmires and subjectivity. From the outside, the scientifically minded regard God as an odd if not outright infuriating concept. Science reveals a matter-based world operating by physical laws, devoid of any evidence of supernatural intervention. Where in this picture is there room or need for an omniscient supernatural being?

To his credit, atheist champion Richard Dawkins is clear on how he defines God—he is a personal God and a "designing" God.<sup>7</sup> As a personal God, he is bound to answer prayers, forgive and punish sins, intervene occasionally with miracles, and regularly fret about the good and bad behavior of his people. As a designing God, he is responsible for every minute detail of the natural world. For Dawkins this is precisely the kind of God that science cannot tolerate. Einstein's metaphorical God of the cosmos, Jefferson's deist God, Spinoza's pantheist God—superfluous, yes, but far more palatable for those who simply can't be weaned off the infantile diet.

From outside, events in the natural world so obviously contradict the possibility of this personal-designer God that the need to even point it out is tiresome. Miracles, answered prayers, divine justice—all require violating the laws of physics, and that just doesn't happen. And as for divine design,

one need only consider the excessive predation and extinction that characterize the evolutionary process to know how ludicrous that idea is. The evidence is clear: Some 99% of all species that ever existed are now extinct. What a waste! For Dawkins, this easily refutes the presence of a benevolent or even intelligent God. Any God who intended to create humans certainly could have done it without all the suffering, bloodshed, and death inherent in the evolutionary process.<sup>8</sup> To read the world any differently is to allow the whale of ignorance to swallow you whole.

### *The View from Inside*

For those for whom God exists as friend, wise counselor, or loving spirit, Dawkins's critique is foreign to the point of being almost inscrutable. The existence of a personal, benevolent God—so obscured from Dawkins's view—is plainly obvious to them. The answered prayer is in the chance meeting with the long-lost friend, or in the promotion that was *not* granted but that forced a needed change of career. The divine design is in the hopeful sunrise after the storm; or in how the fire's fury destroys yet cleanses and, in its aftermath, how the fragile shoots of renewing green bravely poke up from the still-smoldering earth.

These differences are more than just mere interpretive gloss. Religion affects the most basic processes guiding our visual perception. A recent study showed that Dutch Calvinists respond significantly more slowly than Dutch atheists do to visual patterns that are diffusely spread across a scene.<sup>9</sup> This has been linked to the Calvinist doctrine of "sphere sovereignty," where each sector of society is believed to have its own equal standing in terms of responsibility and authority. Being raised in an environment where this doctrine is prevalent appears to affect early perceptual processing such that local details take on greater significance. This difference in visual processing was found despite the fact that the Calvinists and atheists shared a common culture and were matched on variables such as educational background, age, IQ, and socioeconomic status. The authors summarized the findings in stark terms:

It seems possible that religious beliefs may indeed lead to different and . . . sometimes incompatible interpretations of the same incident. That this can happen is a well-known empirical fact, but that it can originate in basic automatic visual operations that precede conscious representation is surprising and in some sense worrying—as it seems to work against the scientific ideal that careful observation is sufficient to reach agreements about basic facts and what we consider reality.<sup>10</sup>

From the initial processing of visual inputs to the ultimate interpretation of experience, believers and nonbelievers really do see the world differently.

To the believer, perfectly natural events reveal the unmistakable breath of the supernatural. For theologian Paul Tillich, it is in this profound experience of life's "depth" that God is to be found:

For if you know that God means depth, you know much about Him. You cannot then call yourself an atheist or unbeliever. For you cannot think or say: Life has no depth! Life itself is shallow. Being itself is surface only. If you could say this in complete seriousness, you would be an atheist; but otherwise you are not. He who knows about depth, knows about God.<sup>11</sup>

This experience of "depth" has led many to view God not so much as a "designer" who obsessively controls all the minutiae of the natural world, but instead as a "parental" figure, far more intent on persuading and inspiring his creation than dictating to it. Theologian John Haught expresses it this way:

From Augustine and Aquinas to recent religious thinkers such as William Temple and Pierre Teilhard de Chardin, God is seen not so much as directly engineering this life-endowed world as arousing the world to self-creativity.<sup>12</sup>

From a specifically Christian perspective, this inspiration is toward increasing self-sacrifice. The Christian God is a God who willingly renounces the power to impose his will on the universe and instead models (through the image of Jesus) humility and service as the highest ethic. From the Jewish perspective, the entire notion of a personal-designer God is a rather tangential one. One's relationship with God is far more a matter of practical behavior than of any theological commitment to God's nature. In other words, first and foremost, a good Jew follows God's laws; whether he or she actually believes in Dawkins's personal-designer God is quite secondary.<sup>13</sup>

Even the massive suffering and death of the evolutionary process take on a new meaning within the religious relationship. Suffering is the school by which souls are built, argues Haught.<sup>14</sup> As any parent knows, simply giving a child whatever he or she wants produces an ungrateful, spoiled child. One appreciates the true value of something only by earning it through sweat and sacrifice. The human soul (however one wishes to define it) is not free, and it is only in understanding its profound cost that one can be truly grateful for its presence.

My point here is not to convince you of the rightness or wrongness of any particular worldview, only to impress upon you how different the same thing can look depending upon one's (relational) perspective.

For his part, Dawkins dismisses all this pontificating as little more than intellectual flabbiness.<sup>15</sup> Maybe so, but within the religious relationship, the

world takes on a much different cast. Deeply moved by what they see, religious thinkers over the years have constructed a long-standing theological tradition addressing the very issues that Dawkins finds so devastating to their faith. Unfortunately, this tradition and today's aggressive atheism seem only to talk past each other for want of a common language with which to describe the very different worlds they encounter.

So, then, what are we left with? Are we simply to resign ourselves to the fact that these opposing forces have no hope of constructive dialogue? Not necessarily. For those of goodwill, a path toward communication is possible, but one must first recognize the proper questions to ask. Preaching to one's own choir about God's existence or nonexistence, his greatness or depravity, his necessity or necessary termination is only a sure recipe for deepening animosities behind increasingly fortified boundaries. You can't tell someone they don't have a relationship that they are convinced they have. Likewise, you can't force someone into a relationship they are not interested in.

A modest proposal, then: Let us agree that the issue of God's existence is irresolvable and that it is irrational to debate irresolvable issues. Instead, let us focus our energies on the consequences of a relationship with God (or, more generally, the supernatural). If that relationship compels individuals to live lives of greater compassion, service, and healthy self-restraint, then the relationship is probably worthwhile. If that relationship produces only self-righteous arrogance, ignorance, and intolerance, then a divorce is preferable. The critical question guiding the God discussion should not be "Is there something supernatural to relate to?" Instead, it should be "Are we better off with or without these supernatural relationships?"<sup>16</sup>

## Defining Religion

While numerous and various definitions of religion have been proposed, most of them include some relational theme. I am not the first to propose that religion represents an expansion of the human social realm. Nearly half a century ago, anthropologist Robin Horton offered a definition of religion that focused squarely on this very element: "Religion," he wrote, "[could] be looked upon as an extension of the field of people's social relationships beyond the confines of purely human society."<sup>17</sup> In what follows, I will review and critique a number of definitions; however, it is Horton's that best captures the model of religion that I am proposing.

In his book *Primitive Culture* (1871) anthropologist Edward B. Tylor claimed that, at minimum, religion required belief in supernatural beings.

Tylor's colleague James George Frazer concurred with this sentiment but added the additional notion that the supernatural beings must have some power over man's destiny: "By religion, then, I understand a propitiation or conciliation of powers superior to man which are believed to direct and control the course of Nature and human life."<sup>18</sup> The classic definition of religion found in the *Oxford English Dictionary* (1971) echoes that of Frazer: "recognition on the part of man of some higher unseen power as having control of his destiny, and as being entitled to obedience and worship." More recent definitions follow this basic theme—that fundamentally religion entails the belief in supernatural entities that have the power to direct human destiny. For example, according to sociologist Steve Bruce religion involves "beliefs, actions, and institutions predicated on the existence of entities with powers of agency (that is, gods) or impersonal powers or processes possessed of moral purpose (the Hindu notion of Karma, for example) which can set the conditions of, or intervene in, human affairs."<sup>19</sup>

Psychologists of religion Michael Argyle and Benjamin Beit-Hallahmi are more concise: "A system of beliefs in a divine or superhuman power, and practices of worship and other rituals directed toward such power." Another sociologist, Rodney Stark, writes, "Religion consists of very general explanations that justify and specify the terms of exchange with a god or gods." Stark's definition explicitly brings in the notion of reciprocity between powerful gods and the relatively weak humans who wish to influence them through worship and sacrifice.<sup>20</sup>

The relational elements in these definitions are not difficult to see. The essential feature of religion is the recognition of a spiritual realm populated with powerful agents. Humans must interact with these agents in order to direct or influence the dispensation of their power. Thus, humans relate to gods or spirits in a prescribed manner—through ritual, sacrifice, and prayer. Using these specific relational tools, humans engage the gods and secure their goodwill. Humble prayer brings a favorable divine response; Agamemnon sacrifices his daughter Iphigeneia to the goddess Artemis in return for calm seas, a mystic fasts in order to unite with God, and so forth.

Recently, definitions emphasizing belief in gods and human interaction with them have been eclipsed by definitions emphasizing the human search for the sacred or the transcendent. Definitions in this category include "a covenant faith community with teachings and narratives that enhance the search for the sacred"; "a personal or group search for the sacred that unfolds within a traditional sacred context"; "a set of symbolic forms and acts that relate man to the ultimate conditions of his existence"; and "the inner experience of the individual when he experiences the Beyond, especially . . . when he actively attempts to harmonize his life with

the Beyond." William James's definition of religion falls into this category: "Religion, in the broadest and most general terms possible[,] . . . consists of the belief that there is an unseen order, and our supreme good lies in harmoniously adjusting ourselves thereto."<sup>21</sup> Alfred North Whitehead offers a somewhat more poetic (and far wordier) definition:

Religion is the vision of something which stands beyond, behind, and within, the passing flux of immediate things; something which is real, and yet waiting to be realized; something which is a remote possibility, and yet the greatest of present facts; something that gives meaning to all that passes, and yet eludes apprehension; something whose possession is the final good, and yet is beyond all reach; something which is the ultimate ideal and the hopeless quest.<sup>22</sup>

Though less obvious, the relational element is still present in these definitions. Many theologians and religious scholars have argued that the search for the sacred is essentially a relational one—that is, either searching for a particular kind of relationship to the sacred, or searching for sacredness within the context of one's human relationships.<sup>23</sup> The "search for the sacred" or the "[harmonizing of one's] life with the Beyond" or the "adjusting [of ourselves to] an unseen order" all require actions directed toward others in our community. The community itself becomes endowed with a divine character such that human relationships and human activities are themselves seen in a supernatural context. Thus in this model, one's relationship with the supernatural is often mediated through one's relationships with others and with the world at large. Rituals of worship serve to remind believers of the divine nature of all existence.

## Religion as Relationship

In our ordinary human experience it is other personal subjects that matter most to us, and no amount of scientific expertise can tell us who they really are. Would it be otherwise with God . . . ?

. . . Just as the story of anyone's life is the story of relationships—so each person's religious story is the story of relationships.<sup>24</sup>

Some may find it odd to say that people have "supernatural" relationships just as they have "natural" ones. But for most religious people this is, in fact, what religion is all about. When people are asked which of the following most closely reflects their view of religious faith—(1) a set of beliefs, (2) membership in a church or synagogue, (3) finding meaning in life, or (4) a relationship with God—51% of them pick (4), compared to 20% or less for all the others. In his surveys of both the general public and

college students (both largely Christian, but not necessarily evangelical), psychologist of religion Lee Kirkpatrick finds that over two-thirds respond affirmatively to the statement "Do you feel you have a personal relationship with Jesus Christ and/or God?" Decades of studies on religion as attachment indicate that there is considerable overlap between human relationships and relationships with supernatural agents.<sup>25</sup>

The quality of one's interpersonal attachments has important psychological ramifications. Securely attached children find comfort, safety, and anxiety reduction when in close proximity to their caregivers. Furthermore, adults who have strong social attachments are typically healthier, happier, and more confident than those with no attachments or lower-quality ones. Similar outcomes have been documented for relationships with God. Increasing degrees of religious commitment correspond to increases in one's sense of personal competence and control as well as decreases in trait anxiety. These positive outcomes appear to be attributable to the relational aspects of religion. A number of studies show that such measures as "the experience of God in prayer" or the "proximity and depth of a divine relationship" correlate more strongly with measures of well-being than do other religious variables. Furthermore, those who view God as warm, responsive, and caring (i.e., those with a secure attachment to God) score significantly higher on measures of well-being and life satisfaction and lower on measures of depression, loneliness, and the presence of psychosomatic symptoms than those who view God as impersonal, uncaring, and distant (i.e., those with an avoidant attachment).<sup>26</sup>

The type of personal relationship that one has with significant others (especially parents) turns out to be a good predictor of one's relationship with God. Among Catholic teenagers, the perception of parents as loving and nurturing was positively correlated with an image of God as loving, comforting, and nurturing. A similar result was found with fourth graders. Among adolescent boys, images of God are often closely aligned with their perception of their father. An alcoholic, "bad" father was more often associated with a negative image of God. These associations tend to remain intact through adulthood. Those with unusually secure attachments to parents are often among the most religiously committed. Female seminarians and nuns, for example, have been found to have exceptionally secure attachments to their mothers and typically perceive their mothers as highly supportive and helpful.<sup>27</sup>

In a survey of over 200 adults, Kirkpatrick and Shaver found that those classified as being in secure relationships were more likely to view God as loving, accessible, and noncontrolling compared to those in avoidant relationships. People with a history of avoidant attachments are, in general, less religiously committed and more likely to profess agnosticism.



Furthermore, religious conversion is significantly more likely for those adults who, as children, had insecure attachments to parents. One argument is that they might be attracted to a supernatural relationship as compensation for an inadequate human one. Anthropologist Roger Lohmann provides some support for this view by showing that religious conversion is primarily the establishment of a new relationship with a supernatural agent and only secondarily the adoption of a new set of doctrines.<sup>28</sup>

Many of these same patterns have been observed cross-culturally and in non-Christian religious traditions. For instance, a close correspondence has been found between a culture's prevailing parenting style and the prevalence of benevolent or malevolent deities in that culture's religious system. Rejecting parenting styles were associated with a prevalence of malevolent deities, whereas accepting parenting styles were associated with benevolent deities. Hinduism provides another example of attachment dynamics at work. In Hinduism, striving for enlightenment is a central concern. Two of the paths for achieving this are largely nontheistic: *Karma-marga* is the way of works and action; *jnana-marga* is the way of wisdom and philosophy. However, 90% of Hindus follow the way of devotion (*bhakti-marga*), where adherents seek salvation through the mercy of God. This devotion often involves prayers, sacrifices, and other ritual activities designed to draw one nearer to the divine. Most faithful Hindus appear to experience a relation to the divine similar to that of Christians with Jesus or God. This also seems to be true for Buddhists, the vast majority of whom follow the polytheistic Mahayana tradition rather than the nontheistic Theravada tradition.<sup>29</sup>

Lee Kirkpatrick, one of the leading researchers on attachment theory and its application to religion, concludes his review of the religion and attachment literature thusly:

I am suggesting that attachment is not merely a metaphor for people's perceived relationships with God, but "really" is an attachment relationship in every important sense. Attachments differ from other kinds of relationships not by strength, but by function, and I have tried to show here that relationships with God function in the same manner as relationships with parents during childhood.<sup>30</sup>

### *Developing Relationships*

A relational framework describes not only peoples' experience of religion, but also the process of acquiring a particular faith or a particular orientation toward faith. In the past few decades, researchers have debated whether adopting a religious faith is better understood through a *compensation*

model or a *correspondence* model. Compensation refers to the fact that for some individuals, supernatural agents provide the protection, nurturance, and security often lacking in their human relationships—especially parental relationships. These individuals often have a history of insecure attachments to parental and romantic figures, and supernatural attachments appear to compensate for these deficiencies. Correspondence applies more to individuals with a history of secure attachments to parents and romantic partners. They tend to gradually acquire the same religious attitudes and traditions their parents held, part of which involves the view of God or other supernatural agents as creator, wise counselor, or trusted friend. This dual path to religion corresponds roughly to William James’s earlier distinction between the “once-born” and “twice-born” religious believers.<sup>31</sup>

Empirical evidence for both these processes has been found, prompting some to argue that religion comes to people from both “within” and “without.”<sup>32</sup> By “within” they mean by virtue of people’s internal need for emotional security and regulation (insecurely attached individuals). By “without” they refer to those who readily adopt the religious tradition of their parents and community (securely attached individuals). Relationships—whether positive or negative—are thus the catalysts for religiosity.

Finally, Kirkpatrick provides evidence that religion’s historical endurance may be attributable to the fact that it provides its members with such an extraordinary breadth of relational resources. His conclusion builds on the work of Robert Weiss, who identified six types of relational bonds in humans: (1) *attachment bonds* provide comfort and a secure base, (2) *affiliation bonds* provide social integration and a sense of community, (3) *persistent alliance bonds* provide long-term commitments to each other’s well-being, (4) *nurturance bonds* provide support when in distress, (5) *collaboration bonds* provide cooperation in the pursuit of shared goals, and (6) *help-obtaining bonds* provide guidance and counsel. While most personal relationships fall into one or just a few of these types, religion may be unique in that it has the potential to cover most if not all of these needs. This is partly because religion draws on not only a vast network of human resources, but perceived supernatural ones as well.<sup>33</sup>

### *In Good Times and Bad*

The evidence that people form attachments to God and other supernatural agents underscores the usefulness of a relationship model in understanding religion. If a primary element of religion is relational, then we would expect the full range of relational emotions to be present in people’s interactions with supernatural agents. Just as in human relationships, when relational

trust in the supernatural agent is questioned or broken, anger, confusion, and a sense of betrayal may ensue. Thus, we would expect that along with the joy and comfort often associated with religious faith, the more negative relational emotions would emerge periodically as well. Evidence confirms this.

The 1988 General Social Survey found that 63% of Americans reported being angry at God at one time or another. This anger was typically triggered in response to some negative life event that caused personal suffering, loss, or trauma. God was often seen as either actively or passively responsible for the event, even when a human perpetrator was behind it. In some cases the feeling of abandonment and betrayal was so strong that it caused the person to question God's existence. Twenty-one percent of college students who had suffered a major negative life event reported a decreased confidence in God's existence, while 9% had become atheists.<sup>34</sup>

Interestingly, the same factors that predict forgiveness in human relationships are relevant in determining whether individuals forgive God for suffering that they believe is God's fault. Forgiveness is more forthcoming to the extent that (1) God is not seen as having intentionally caused suffering, (2) the person involved has a greater sense of humility and tolerance, (3) the person's prior relationships with God and others were close and secure, and (4) the person's general level of stress is low. As with human relationships, interventions to repair the human-God relationship are designed to resolve negative emotions and rebuild trust. This may be done by encouraging the individual to approach prayer as a conversation with God where one expresses emotions and "listens" for God's reply (through imagery or reading sacred texts). In Judaism the practice of *hitbodedut*—speaking to God as one speaks to one's closest friend—is often encouraged as a means of repairing one's relationship with God.<sup>35</sup>

The range of emotions present in relations with supernatural agents is certainly not confined to Western monotheistic traditions. Among many traditional Asian and African societies, the ancestors are the primary supernatural relational figures. Indeed, these societies typically do not make a distinction between the earthly tribe and the generations of ancestors who have gone before them. They all constitute one interconnected, interactive society. Thus, relationships with deceased ancestors may be as convoluted and complicated as those with parents and relatives.

The Lohorung Rai are a traditional horticultural people living in the Arun Valley of eastern Nepal. For the Lohorung, the ancestors are as present and relevant in everyday life as living members of their family and tribe.<sup>36</sup> Though the ancestors deserve respect because of their age and experience, the Lohorung also see them as almost childlike in their need for constant

reassurance, attention, and placation. The ancestors are easily upset and lacking in discipline. Small, daily acts of ritual and sacrifice are required to keep them contented and their egos unbruised. Even more elaborate rituals are required for major life events—such as the birth of child, who must be introduced to the ancestors with proper ritual in order to avoid misfortune and ostracism.

As wise guardians of tradition, the ancestors serve as steadfast reminders of Lohorung values and history. For this reason they are honored and even feared because of the ease at which they take offense. But they are also understood to have fading mental and physical powers owing to their advanced age and at times must be cajoled or commanded not to overstep their proper place. In the midst of all this, the Lohorung firmly believe that maintaining a good relationship with the ancestors is essential to their personal and tribal well-being. Like human relationships, these supernatural relationships must be constantly monitored, nurtured, and, when necessary, repaired.

### *Religion and the Brain*

Evidence for religion as fundamentally relational can also be seen in the brain. Recent advances in neuroscience allow researchers to monitor brain activity while subjects are engaged in various mental activities, including religious or mystical ones. For example, one study used positron emission tomography (PET scan) to monitor brain activity as believers achieved a religious mental state by reciting the 23rd Psalm. The PET scan detects cerebral blood flow, allowing researchers to see which parts of the brain are demanding more resources and therefore (presumably) working harder.<sup>37</sup>

Other studies have used similar testing procedures. For example, Canadian neuroscientist Mario Beauregard had nuns recall their most intense mystical experience; meanwhile, he monitored their brain activity using functional magnetic resonance imaging (fMRI). Though the technology is somewhat different from PET, the bottom line is basically the same: fMRI allows researchers to make inferences about which parts of the brain are demanding more resources when certain cognitive activities are taking place. PET and fMRI have also been used to study specific meditative practices and their effects on the brain. Finally, University of Pennsylvania neuroscientist Andrew Newberg and colleagues have pioneered the use of SPECT (single photon emission computed tomography) in studying the effects of meditation in both Catholic nuns and experienced Buddhists meditators. Though less precise in localizing brain activity, SPECT is also less intrusive than other measures and allows subjects greater freedom in achieving “peak” meditative experiences.<sup>38</sup>

Though these studies have used different subjects, brain scan technologies, and methods of achieving religious or mystical states, a consistent finding is activation in two brain regions: the prefrontal cortex and the superior temporal/inferior parietal cortex. Importantly, other brain imaging studies have found these same two regions to be critical to social functioning. The prefrontal cortex is important in understanding other's motivations and goals in social situations. Furthermore, the frontmost part of the prefrontal cortex (the orbital prefrontal cortex) is important in reading facial cues and emotions. The superior temporal sulcus is important in detecting biological movement, processing dynamic facial cues, and attributing agency or goal-directedness to actions and actors.<sup>39</sup>

A very recent study has found that at the brain level, talking with God is the same as talking to a friend.<sup>40</sup> Researchers had 20 devout Christians carry out both religious (reciting the Lord's Prayer, improvising a prayer to God) and secular (reciting a nursery rhyme, improvising a prayer to Santa Claus) activities. As with earlier studies, when subjects improvised a prayer to God, there was activation in the prefrontal and superior temporal/inferior parietal cortices (among other areas). Importantly, the prefrontal cortex was not active when subjects made improvised prayers to Santa Claus. Even though the outward actions were the same, the brain made an important distinction between a partner who was believed to be capable of reciprocating (God) and one who was considered purely fictional (Santa).

A recent review of the neuroimaging literature on religious experience has concluded that "relational cognition" lies at the core of brain's response to the divine. Neuroscientist and theologian Nina Azari points out how the broad areas of the frontal cortex active in religious experiences are also critical for such social cognitive functions as understanding others' intentions, social decision making, and empathizing. This, she contends, provides compelling evidence that the religious experience is deeply intertwined with what she calls "relational cognitvity." Reinforcing Azari's conclusion is a recent study showing that areas of the frontal lobe, well established as being part of the brain's Theory of Mind system, are integral to people's religious beliefs. Theory of Mind refers to our capacity to infer desires, emotions, intentions, and other mental states in others.<sup>41</sup> Thus, the parts of the brain governing interpersonal relationships govern religious beliefs and experiences as well.

## Summary

However we define religion, it is defined in relational terms, either with regard to an exchange relationship with powerful supernatural agents or as

a response to a perceived sacred cosmic order that calls us to relate to other humans and to the world in a different, more meaningful way. When we examine the physical and psychological properties of people's relationships with supernatural agents, they appear in nearly all important respects to mirror those present in human relationships. Secure attachments to people predict secure attachments to gods and spirits. Secure attachments to gods and spirits provide the same safety, comfort, and anxiety-reducing benefits associated with secure human attachments. Additionally, the physical health benefits associated with secure human attachments are present in supernatural relationships as well. Those whose human (especially parental) relationships have been unsatisfactory are significantly more likely to undergo a religious conversion, suggesting the need for supernatural compensation for inadequate human attachments. Finally, important parts of the social brain are activated when someone has a religious experience, suggesting that in many respects the brain treats a religious experience as a social encounter. Religion is many things, but the relational element is at its core. Nonrelational religion, if it is religion at all, is hollow.