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Archive for the Psychology of Religion

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PREFACE

With this volume of the Archiv für Religionspsychologie (Archive for the Psychology of Religion) some innovations have been introduced, which the Editors would like to explain briefly.

Essentially, in comparison with the previous volumes published by Brill, two changes have occurred. 1. Being a yearbook, the Archiv is not very apt for discussion of issues in successive volumes. However, discussion may happen within a single volume, and facilitating such discussion has been adopted as part of the editorial strategy. Thus, considering the publication of Lee Kirkpatrick’s monograph on a combination of an evolutionary approach and attachment theory to the psychology of religion, an important contribution to the literature, the Editors of the Archiv have requested this author to write an article that could be sent to others for comments, to which he could respond again. The result is an interesting discussion on relevant themes in contemporary psychology of religion between well known authors like Beit-Hallahmi and Watts on the one hand and Kirkpatrick on the other hand. Also, during the (blind) review process of Watson and Morris’ submission, important questions were raised by some of the reviewers. The Editors decided to invite two colleagues representing different research traditions to comment on the article, comments to which Watson rejoins, resulting again in a worthwhile exchange of thoughts and ideas. The Editors hope to be able publish one such discussion in every subsequent volume.

In the future, they will also allow for the publication of a number of otherwise related articles as special section of the Archiv.

2. Although the Archiv continues to distinguish itself from journals that publish several articles in several smaller issues a year (and that consequently can allow only limited space to individual contributions) by publishing more lengthy articles (as may be required for an expose of theoretical issues, reports of qualitative research, analysis of historical developments, etc.), a new section has been introduced in which also shorter research notes can be published.

Also with this volume, a number of colleagues have been added to the Editorial Board, from a variety of states, thus underlining the international orientation of the Archiv für Religionspsychologie. The publication
of one article in German in this volume illustrates its international character too.

Overall, editorial policy is to remain open to the broadest possible range of theoretical and methodological orientations within contemporary psychology of religion. The Archiv will continue to publish articles from very different corners both within the discipline and within the field, to allow for different styles and to accept submissions in English, German and French (for instructions to authors, cf. the Call for Papers elsewhere in this volume).

Jacob A. Belzen
on behalf of the Editors
INVITED PAPERS, CRITIQUES AND RESPONSE
In this summary of my recent book (Kirkpatrick, 2004), I outline a general theoretical approach for the psychology of religion and develop one component of it in detail. First I review arguments and research demonstrating the utility of attachment theory for understanding many aspects of religious belief and behavior, particularly within modern Christianity. I then introduce evolutionary psychology as a general paradigm for psychology and the social sciences, arguing that religion is not an adaptation in the evolutionary sense but rather a byproduct of numerous psychological systems that evolved for other adaptive purposes, of which the attachment system is just one example. I conclude by summarizing numerous advantages of this framework over other extant approaches to the psychology of religion.

Despite much empirical research, the psychology of religion field has made sadly little progress toward a comprehensive scientific understanding of religion. This is not to say that we haven’t learned anything, but rather that we have bits and pieces that overlap in some ways and fail to fit together into any kind of meaningful framework. What I think we have learned is this: From the endless debate over the definition of religion, we have learned that the topic of investigation is enormously complex and multifaceted; thus any comprehensive theory will have to be commensurately multifaceted to accommodate it. From the measurement work in psychology we have learned that beliefs about God, religious motivation, and other psychological aspects of religion are similarly complex and multifaceted, again pointing to the need for a large-scale, all-encompassing framework. Cutting through the countless debates over interpretation, we have learned from anthropology that religion is (in some form or another) universal across human societies, yet also is highly variable.
in specific form across cultures. Again setting aside the details, we have learned from sociology that religions more often than not involve groups, which compete with one another, splinter, and evolve in various ways over time. A comprehensive approach to religion will have to provide a framework for dealing with these issues as well.

In this essay, and the book it summarizes, I propose a couple of starting points: first, one particular psychological theory that I believe is useful for understanding a wide range of religious phenomena, and then a larger metatheory within which the theory fits and which provides a paradigm for organizing and integrating psychology in general as well as the psychology of religion in particular.

**Introduction to Attachment Theory**

John Bowlby may well have been the first modern evolutionary psychologist, as his conceptualization of the attachment system is a prototypical example of the way evolutionary psychologists today view the organization of behavioral and cognitive systems. Trained in the object relations school of psychoanalysis, he intended his theory to replace psychoanalytic theory based on important developments in the emerging field of ethology. Lorenz’s famous work on imprinting suggested the existence of a behavioral system that served to keep goslings close to their mothers; Harlow’s equally famous work with cloth and wire monkeys demonstrated that infants sought physical contact with mothers for reasons other than food. Bowlby also adopted the ethologists’ general conceptualization of the organization of behavior and motivation. In contrast to psychic-energy models that postulated instinctive drives welling up until finding a release, control systems theory postulated distinct behavioral systems that are turned on and turned off by particular kinds of stimuli.

Based on these and many other observations, Bowlby postulated the existence of the attachment system as an evolved behavioral system in humans and other primates, which was designed by natural selection to maintain proximity between infants and their primary caregivers (i.e., attachment figures), with the ultimate purpose of protection of helpless infants from environmental dangers such as predators. It is a goal-corrected system that monitors a variety of internal and external variables and determines whether the primary caregiver is
sufficiently close and available, with closer proximity desirable if the environment appears dangerous or one’s current health status makes one especially vulnerable. If, compared to the current system set point, the attachment figure is regarded as insufficiently proximal and available, a suite of behavioral options is activated. These attachment behaviors, including crying, calling, and reaching, are designed to bring the attachment figure into closer proximity. The attachment figure is said to function in this context as a haven of safety.

Bowlby emphasized that attachment is just one of numerous evolved, functionally specialized behavioral systems underlying infant behavior. In the absence of danger and illness, the caregiver functions as a secure base, allowing the activation of other behavioral systems such as the exploration system and affiliative or sociable systems regulating relationships with peers. Phenomenologically, the current state of the attachment system is experienced in terms of level of felt security. In Bowlby’s (1973, p. 202) words, “When an individual is confident that an attachment figure will be available to him whenever he desires it, that person will be much less prone to either intense or chronic fear than will an individual who for any reason has no such confidence.”

Individual Differences

Perhaps the best-known aspect of attachment theory concerns the nature and measurement of individual differences in attachment. Empirical research on attachment was pioneered by Mary Ainsworth and her colleagues, who developed a laboratory procedure known as the Strange Situation to assess individual differences in infant-mother attachment (Ainsworth, Blehar, Waters, & Wall 1978). Based on extensive research with this system, Ainsworth identified three general patterns of attachment, the origins of which are found in large part in maternal behavior—that is, the child’s experience in relevant situations across the first year or so of life. The child develops internal working models (or mental models) about the availability and responsiveness of their primary caregivers which guide future behavioral, emotional, and cognitive responses in social interactions. Much empirical research demonstrates that classifications based on the Strange Situation paradigm are fairly stable between one and six years of age, and are predictive of many aspects of personality and social behavior throughout childhood.
Attachment in Adulthood

Bowlby clearly believed that attachment processes were important across the entire lifespan—“from the cradle to the grave,” in an oft-quoted phrase. Shaver, Hazan, and Bradshaw (1988) outlined a case for conceptualizing adult romantic love relationships as the “integration of three behavioral systems”: attachment, caregiving, and sex/reproduction. In such relationships, they argued, romantic partners serve as attachment figures for one another, turning to each other for comfort and support in times of distress and using each other as a secure base. Shaver et al. reviewed a diverse array of research findings and observations to demonstrate the many similarities and parallels between infant-mother interactions and interactions between adult lovers. For example, prolonged eye contact, cooing or talking “baby talk,” and other intimate behaviors are similar to the sorts of behaviors displayed by infants to elicit and maintain contact with an attachment figure. Hazan and Shaver (1988) subsequently reasoned that if adult love relationships function in part as attachments, then patterns of individual differences—“attachment styles”—may exist among adults that parallel those documented by Ainsworth in infants. In their two studies and hundreds of studies by other researchers since, self-report measures of these styles have been shown to correlate with countless theoretically relevant variables ranging from relationship satisfaction to physiological responses to stress.

God as an Attachment Figure

The principal and most obvious point of departure for my discussion of religion is the observation that the perceived availability and responsiveness of a supernatural attachment figure is a fundamental dynamic underlying Christianity and many other theistic religions. Whether that attachment figure is God, Jesus Christ, the Virgin Mary, or one of various saints, guardian angels, or other supernatural beings, the analogy is striking. The religious person proceeds with faith that God (or another figure) will be available to protect and comfort him or her when danger threatens; at other times, the mere knowledge of God’s presence and accessibility allows him or her to approach the problems and difficulties of daily life with confidence.

Ainsworth (1985) summarized five defining characteristics that distinguish attachment relationships from other types of close relationships.
In this section I argue that God or other deities commonly meet these criteria and thus reflect true attachments.

*Seeking and Maintaining Proximity to God*

During the first six months of life, infants depend heavily on proximal behaviors to initiate and maintain contact with their mothers, such as crying, upraised arms, clinging, and cuddling. Under normal conditions these proximal behaviors are progressively replaced with more distal behaviors as children mature; eventually older children can be comforted by visual or verbal contact, or even the mere knowledge that the attachment figure is potentially available if needed. It seems only a small step to suggest that a noncorporeal deity can function fully as, and offer the psychological provisions of, an attachment figure.

Of the several supernatural qualities typically attributed to God or gods, one of the most common is that God is omnipresent. Yet despite our remarkable abilities for abstract representation and imagination, attachment to a purely abstract being poses a formidable challenge. Thus, virtually all religions provide tangible places such as churches and shrines where worshipers can go to be “nearer to” God. People often visit churches spontaneously at times other than formal services, especially when troubled, to speak with the deity and feel his presence. Moreover, each religious tradition has its own set of images, icons, and other physical representations that serve as concrete reminders of God’s presence. Some infant attachment behaviors display intriguing analogues in religion as well, such as the upraising of the arms in worship, and especially many forms of prayer.

*God as a Haven of Safety*

Bowlby (1969) identified three classes of stimuli hypothesized to activate the attachment system: (a) frightening or alarming environmental events; (b) illness, injury, or fatigue; and (c) separation or threat of separation from attachment figures. If God functions psychologically as an attachment figure, then we should find that people turn to God, and evince attachment-like behaviors toward God, under these conditions. Indeed, in Western Christian traditions at least, these are precisely the three categories of “trouble and crisis” when people are most likely to seek God’s support and comfort (Hood et al., 1996, pp. 386–387).
The haven provision offered by God is captured neatly by the adage that there are no atheists in foxholes. It is difficult to imagine a situation more deserving of the term “unusually stressful times” than finding oneself on a battlefield. Allport (1950, p. 57) conducted interviews with a large number of World War II combat veterans about the role of their religious beliefs while on the battlefield, and came away with the conclusion that “[t]he individual in distress craves affection and security. Sometimes a human bond will suffice, more often it will not.” Numerous empirical studies point to the role of prayer and God as providing a haven of safety in times of fear and distress, such as when facing serious health-related problems.

**God as a Secure Base**

Evidence for the idea that religious beliefs, and a personal attachment relationship to God (or Jesus, etc.) in particular, offer this provision comes from many sources. Phenomenologically, believers think of God or Jesus as being by one’s side, holding one’s hand, and so forth. Secure-base themes are in clear evidence throughout much of Christian scripture, particularly in the Psalms.

To the extent that God functions psychologically as an attachment figure and provides a secure base for believers, belief in God should confer certain psychological benefits. In numerous empirical studies, religious commitment has been shown to correlate positively with a variety of indicators of good mental health. At the same time, it is important to note that these correlations are highly differentiated, and suggest that the religion-health links are strongest where they reflect attachment-based processes. For example, intrinsic religious orientation is positively correlated with two conceptualizations of mental health, *freedom from worry and guilt* and *personal competence and control*, but not to several other aspects of mental health.

**Responses to Separation and Loss**

According to Bowlby, the threat of separation causes anxiety in the attached person, and loss of the attachment figure causes grief. If God functions psychologically as an attachment figure, then separation from or loss of God should engender these same kinds of responses. Determining whether God meets these criteria is a difficult matter, because one does not become separated from, or lose a relationship with, God in the same ways that people typically lose human
relationship partners. On the other hand, beliefs about what happens after death reflect issues of potential separation from God. The potential for true separation from God is usually seen by believers to come only in the hereafter, at which time one spends eternity either with God or separated from God. In most Christian churches, separation from God is the very essence of hell. The most common way of “losing” God is simply ceasing to believe in the existence of God (or at least of a particular image of God). Defectors from cults commonly experience psychological symptoms, including “separation anxiety,” similar to those associated with marital separation and divorce.

Since loss of an attachment figure is an event particularly likely to activate attachment behavior, the attachment model would predict that religious behavior and belief should increase during periods of bereavement. Empirical research shows that bereaved persons feel more religious and engage in more prayer than they did prior to the death, and that their religious belief and commitment is correlated positively with adjustment and coping to loss of a spouse. The frequent loss of attachment figures may contribute to increases in religiousness in the elderly.

Other Attachment Processes in Religion and Beliefs about God

In addition to these arguments suggesting that God meets the criteria for an attachment figure, other observations about religion suggest an important role of attachment processes.

First, to the extent that the attachment system is implicated in at least certain aspects of religious belief, we should expect the emotional as well as the cognitive machinery of attachment to be in evidence as well. In particular, if a person is attached to a deity or other religious figure, the person should feel love toward, and the sense of being loved by, that figure—just as children love and feel loved by their parents and adults in romantic relationships love each other. The emotion of love is, of course, central to Christianity. In particular, numerous scholars including William James (1902) have likened the process of religious conversion to that of falling in love.

Apart from the question of love per se, the general idea of God as a parent-like figure has a long history in the psychology of religion. Freud (1961/1927) is of course the most (in)famous example, arguing that God was an exalted, protective father figure. Researchers have long debated whether images of God are essentially “masculine”
and “paternal” or “feminine” and “maternal.” The most sensible conclusion from this and other research seems to be that images of God combine stereotypically feminine qualities (loving, nurturing) and stereotypically masculine qualities (strong, protective). Such an individual would function ideally as a secure base and haven of safety, irrespective of gender.

To the extent that God functions psychologically as an attachment figure, we might expect the structure of individual differences in God images to resemble that of parental images. Indeed, much factor-analytic research on God images confirms this expectation. In virtually every factor-analytic study published, irrespective of the particular kinds of items used, the first (and large) factor to emerge invariably reflects the idea of God as loving, caring, and benevolent. In addition, many studies point to a second major factor reflecting something like a Controlling God dimension. Interestingly, these two dimensions appear to map neatly onto the two primary dimensions of parenting that have been widely studied in the developmental psychology literature, labeled alternatively as warmth and control, responsiveness and demandingness, or care and overprotection.

Some Limitations and Extensions

It is tempting to try to explain as much as possible about religion in terms of attachment. However, I think it is important to avoid this trap. As will become clear later, attachment is only one of numerous psychological systems underlying religious belief and behavior, and different aspects of religious belief and behavior are rooted in different systems. With this broader perspective in mind, it is unnecessary (and foolish) to overextend attachment theory beyond its appropriate boundaries.

In polytheistic belief systems, such as the ancient folks religions of Asia and Africa, gods and spirits play any number of different roles. Although one of these roles might be as an attachment figure, in most of these cases I suspect people’s perceived relationships with such deities are not attachment relationships. In many cases, the psychological schema for these gods is one of social exchange—another psychological system to be discussed later—rather than attachment. Another possible application of attachment theory in the domain of religion is the role of clergy and other religious leaders. There is
nothing necessarily unique about religious leaders in this regard: As Bowlby and many others have argued, virtually anyone perceived as a stronger, wiser other can potentially serve as an attachment figure. However, it is important to keep in mind the distinction made by Ainsworth (1985) and others that an attachment is a bond in relation to a particular person, not a role. A minister, rabbi, or priest can serve as an attachment figure, but should not be assumed so strictly on the basis of their role. Relationships with religious leaders may often reflect instead processes related to prestige and status rather than attachment.

Can a person be attached, in a strict Bowlbian sense, to a group? Bowlby thought so, but I disagree. Instead, I suggest that most group dynamics reflect psychological processes of coalitional psychology, rather than attachment. People may well derive feelings of security from group memberships, but for a different set of reasons following from a different evolutionary history. Coalitional psychology may also underlie perceptions of some religious leaders, particularly those of large religious groups with whom most followers have no personal relationship.

A natural question to pose for an attachment account of religious beliefs concerns the applicability of the model to nontheistic belief systems, particularly Eastern religious traditions. A belief system in which there are no personalized gods is indeed unlikely to provide much fertile ground for attachment theory. On the other hand, it is important to realize that many Eastern religions are considerably less devoid of personalized gods than is commonly thought. This is especially the case with respect to the beliefs of ordinary people which, as in Christianity, often bears little resemblance to those of studious theologians pondering the mysteries of the universe in monasteries and seminaries. The major Eastern religions offer multiple variants, many of which are not at all “godless.” The most popular variants of both Hinduism and Buddhism, for example, involve personal gods with whom people believe they have personal relationships. Moreover, when these religions spread into new areas, they did not displace the preexisting folks religions that were populated with personalized deities, which continued to exist in the minds of the masses. So long as ideas about personalized deities are around, people seem to find them attractive and plausible.
Individual Differences in Attachment and Religion

To this point I have focused on the normative aspects of attachment theory and religion, for example by showing that God, as typically conceived in Christianity, displays all of the defining characteristics of an attachment figure. I now switch focus to two sets of hypotheses about individual differences in attachment and religion that follow naturally from the idea that the attachment system is involved in shaping and maintaining many aspects of religious belief. The basic premise is that if this system, including its functional dynamics and internal working models, underlies thought and behavior in the context of both human interpersonal relationships and religious beliefs, then individual differences in the workings of the system should be evident within both domains.

Mental Models and the Correspondence Hypothesis

If God functions psychologically as an attachment figure, in the same manner as children’s caregivers and adult romantic partners, then these observations lead to a straightforward set of predictions that I have referred to as the correspondence hypothesis: Individual differences with respect to attachment styles should parallel, in important respects, individual differences in beliefs about God and related aspects of religion. For example, people characterized by a secure attachment style would be expected to view God, like their human relationship partners, as an available and responsive attachment figure who loves and cares for them, whereas avoidant persons should be more likely to see God as remote and inaccessible, as cold and rejecting, or simply as nonexistent.

One form that such correspondence should take is between internal working models (IWMs) of human attachment figures and beliefs about God at any given point in time. Several studies have now been conducted to examine the relationship between adult attachment styles and individual differences in religious belief. For example, people who classify themselves as secure are significantly more likely than those classified as avoidant to view God as more loving, less controlling, and less distant/inaccessible; avoidant persons are less religiously committed than secure persons. Studies employing an alternative measure of adult attachment, in terms of separate dimensions of positive/negative IWMs of self and of others, show that both are
related to religion measures. Specifically, IWMs of self are most strongly related to images of God, whereas positive models of others were most strongly associated with belief in a personal (vs. impersonal or nonexistent) God, and belief in having a personal relationship with God (as well as Distant, but not Loving, God images). This differentiated pattern of findings suggests that IWMs of self and others may operate separately in shaping people’s religious beliefs. Beliefs about what God is like—that is, whether God is viewed as loving and caring or as controlling and wrathful—appear to correlate with mental models of the self. In a word, people who view themselves as loveable and worthy of being cared for are those most likely to see God as the kind of being who loves and cares for people. However, the belief that God has these characteristics is distinct from the question of whether one has—or could possibly have—a personal relationship with him.

In studies designed to assess the longitudinal relationship between adult religion and (retrospective reports of) childhood attachments with parents, significant statistical interactions show that correspondence is observed only when mothers were reported to have been relatively religious during the respondent’s childhood. Thus direct correspondence was found only among participants reporting secure maternal attachment (with the exception of one particular religion measure to be discussed in a subsequent section).

Granqvist (1998) has thus proposed an alternative explanation for this interaction, according to which it may instead be individual differences in attachment that moderate the effects of parental religion. Secure attachment, he suggests, facilitates the socialization of children to parental religion, whereas insecure attachment does not. Thus, those with secure childhood attachments become religious if their parents were religious, but not if they weren’t; those with insecure childhood attachments follow the opposite pattern. Granqvist referred to this process as socialized correspondence, where “correspondence” now refers to the parallel between one’s religious beliefs and one’s parents’ beliefs—rather than, as in my interpretation, between one’s religious beliefs and security of one’s own attachment style (or prior attachment experience). Granqvist and colleagues have provided additional empirical support for their interpretation using a measure of socialization-based religiosity, to which security of childhood attachment is positively related but avoidance and ambivalence inversely related. Moreover, religious changes described retrospectively by secure participants were
characterized by early rather than late, and gradual rather than sudden, onset, as well as with “themes of correspondence” reflecting adoption of significant others’ beliefs. The general picture painted here is one of secure children growing into the religious beliefs of their parents in a gradual, conventional manner—perhaps the most common pathway to adult religiousness in most contexts. In the end, Granqvist concludes that both kinds of correspondence are required, which he labels the two-level correspondence hypothesis.

God as a Substitute Attachment Figure: The Compensation Hypothesis

The compensation hypothesis emerges from a consideration of the conditions under which the attachment system is activated and the role of attachment in the maintenance of felt security. Children who fail to establish secure attachments to parents are likely to seek “surrogates” or substitute attachment figures, including teachers, older siblings, other relatives, or, in general, any stronger, wiser other who reliably proves to be accessible and responsive to attachment needs. The importance of God as an attachment figure, then, might be greatest among those people, in those situations, in which human attachments are perceived to be unavailable or inadequate.

In the (simulated) longitudinal research described previously the one measure of religion that was predicted statistically not by an interaction, but directly by individual differences in attachment, was a measure of whether one had ever experienced a sudden religious conversion. In a recent meta-analysis of numerous studies, Granqvist and Kirkpatrick (2004) shows that religious conversions are significantly higher among those reporting insecure (aggregated avoidant and anxious categories) attachments to mothers as compared to secure maternal attachments. Similarly results were found with respect to attachments to fathers. These results are consistent with much previous research on religious converts, who typically displayed problematic family histories. Additional evidence for the compensation hypothesis comes from other studies by Granqvist and others in research with a new measure of emotion-based religiosity.

The emerging picture is one of two different processes involved in the relationship between childhood attachment and adult religion. As Granqvist has noted, we in many ways seem to have rediscovered William James’ (1902) hundred-year-old distinction between “once-born” versus “twice-born” religionists—also known as religions of the
“healthy-minded” versus the “sick-souled”—as well as the long-standing distinction between gradual and sudden religious conversions.

With respect to adult attachment styles, the compensation hypothesis suggests that people who are securely attached to romantic partners, who have successfully made the transition from parental to peer attachment and are now enjoying satisfying mutual attachment relationships, should have no particular motivation to go off in search of an alternative. People who are avoidantly attached are unlikely to be in satisfying romantic relationships, but this is because they prefer it that way: they are not currently seeking an attachment relationship at all. Instead, it is the anxious (a.k.a. preoccupied) group that seems to best fit the bill. These persons find their romantic attachments to be insufficiently intimate. They describe relationship partners as failing to meet their needs for closeness and intimacy, and are likely to say that their strong desire for closeness may sometimes drive partners or potential partners away. Several studies have now supported this hypothesis. Specifically, the likelihood of people turning to God as a surrogate attachment figure is related to the degree to which they see themselves as unworthy of love and care from romantic partners. Negative IWMs of self may, in effect, provide the motivation to turn to God as an attachment figure. However, in order for this to really “work,” one also needs to have positive IWMs of others. That is, one must believe that attachment figures are indeed loving, trustworthy, and reliable. For someone with negative IWMs of others, “finding God” may prove a disappointing experience: The God one has “found” turns out to be, consistent with one’s IWMs of attachment figures in general, a distant, inaccessible God that effectively provides neither a secure base nor a haven of safety.

Contextual Factors in Conversion

Earlier I reviewed literature showing that people turn to God under precisely the kinds of circumstances thought to activate the attachment system. It stands to reason that when people whose attachment systems are readily activated are faced with circumstances that strongly activate that system, they will be particularly strongly motivated to turn to an attachment figure. Religious conversions occur when this search leads to God.

But why God rather than another person? One reason is that many of these attachment-activating contexts involve the separation or loss of a human attachment figure, as in dissolution of romantic
relationships or marriages or death of a spouse; the primary human attachment figure is therefore unavailable. Second, human attachment figures are sometimes simply inadequate, particularly in situations of extreme distress such as the battlefield or a fight against a deadly disease. Third, conversions may occur during times of transition between attachment figures, particularly adolescence. It is easy to see how God—an “ideal” attachment figure—might be perceived as an attractive substitute attachment figure under such conditions.

Attachment in Context: Introduction to Evolutionary Psychology

Attachment theory cannot possibly explain everything about religious belief and behavior, nor should it be expected to do so. Where, then, shall we look for explanations of other aspects of religion that do not fall under the purview of attachment theory? How might we conceptually carve up the vast and variegated topic of “religion” into separate parts to be explained in terms of different theories? And how can we do so in a manner that will lead to a theoretically coherent and integrated view of the psychology of religion, rather than a cobbled-together, incoherent hodgepodge of unrelated ideas?

Evolutionary psychology in its modern form is a broad metatheoretical perspective or paradigm that aspires to provide just such an organizational framework for psychology and other social sciences. It begins, like Bowlby’s work, by assuming that our species’ evolutionary history is deeply relevant to understanding the our psychological architecture. Like eyes and hands, the brain/mind is an organ that has evolved over millions of years via natural selection. Eyes are well “designed” for vision, hands for grasping and manipulating objects, and so forth. Brain/minds must be “for” something too. Evolutionary theory provides a detailed understanding of how natural selection works, and by what criteria: Traits or features that lead to higher levels of reproductive success or inclusive fitness, as compared to other available designs, are favored, and less adaptive variants are selected against. Armed with this knowledge we can develop hypotheses about what the evolved functions of the brain/mind are, and thus be in a better position to figure out what it does and how it works—just as the field of medicine emerged from the Dark Ages only after it adopted a functional view of organs and organ systems.

One important implication of this approach is that the brain/mind, like the remainder of the human body, consists of a collection of
adaptations designed to solve recurrent adaptive problems faced by our distant ancestors. Hearts and lungs each have highly specific functions; the body is not a general, all-purpose nutrition-processing device. Similarly, the brain/mind cannot be a general, all-purpose information-processing device, as is widely assumed in psychology and other social sciences. Like other organs, psychological mechanisms are assumed to be both highly numerous and domain-specific, reflecting the diversity and specificity of adaptive problems to be solved. A mechanism designed to guide food preferences cannot be the same as one designed to guide mate preferences, or we would wind up with some very strange diets and relationships. Human nature, then, is the complete package of species-typical psychological mechanisms we have inherited from our ancestors, and that differs in some ways (but is similar in others) to “dog nature,” “ant nature,” and so on. (For an overview see Buss, 1995, Pinker, 1997, and Tooby & Cosmides, 1992).

In this brief essay I cannot possibly summarize and defend this evolutionary approach sufficiently to make a convincing case. Instead, I will try merely to illustrate some important aspects of its perspective by responding to some common misconceptions about it. In their excellent encyclopedic textbook on psychology of religion, Hood et al. (1996, p. 44) begin their second chapter with a subsection title posing the question, “Is Religion in our Genes?”, to which their reply is:

Although the ‘theory of instincts’ that was so popular in the 20th century subsequently lost favor, especially in light of the growing dominance of behaviorism in North American psychology, the idea of a ‘religious instinct’ did not go away. Many behavioral scientists would be skeptical of this notion, just as they would be suspicious of a claim that we humans are ‘naturally’ inclined to like (or dislike) heavy metal music, or that we have a genetic destiny to be political or to be sports fans. Rather, social scientists would, on the basis of much evidence, point out that our love (or hate) of heavy metal music, and our inclinations toward politics and sports, come more from our socialization experience than from the DNA we have inherited from our parents.

So, how would an evolutionary psychologist respond to these comments? First, an evolutionary psychologist would surely agree that humans do not have genes “for” heavy metal music or politics or sports fandom. Restated more precisely, human evolved psychology does not contain psychological mechanisms designed by natural
selection specifically to produce the behavior of attending AC/DC concerts, or running for Congress, or watching basketball on TV. But this does not at all mean that an understanding of the evolved psychological architecture is irrelevant. No one would argue that our genes code for mechanisms specialized for eating or baking cheesecake, yet an evolutionary perspective is indispensable for understanding its popularity. (Cheesecake exquisitely satisfies our evolved preferences for sweets and fats, which in turn owe to dietary needs which, in ancestral environments, would have been met by rare treats of ripe fruit and meat.)

At the same time, one is confronted with some interesting observations that require explanation: Why are music, sports, and politics, at least if broadly defined, observable in all known human cultures? Heavy-metal music is not universal, of course, but music in some form is universal. So too are competitive games (and the observation of them by others), as well as the struggle for power and dominance within and between social groups. The particular details vary across time and across cultures, but something about “human nature” evidently causes these phenomena to appear in one form or another in all societies. An evolutionary perspective provides a framework for understanding the cross-cultural universality lying beneath the superficial variability.

For example, “political” suggests such general themes as individuals striving for status, dominance, and power (i.e., negotiating status and dominance hierarchies); the construction and maintenance of coalitions and alliances; and the negotiation of conflictual relations between individuals and groups. The exact form taken by these processes varies widely across cultures and even individuals, but they are evident in some form in all cultures. Indeed, similar themes are clearly evident in chimpanzee societies.

Two other points are raised by the question about heavy-metal music. First, note that the issue raised in the quoted passage is not about universality but rather individual differences: Why do some people love it and others hate it? This question presents a fundamentally different kind of problem than questions about the universality of the psychological mechanisms that give rise to them. Second, heavy-metal music (as well as sports) illustrates a complex modern phenomenon for which an evolutionary explanation is likely to involve multiple mechanisms corresponding to qualitatively different aspects of the phenomenon. For example, there is a strong coalitional component
to most fads: Fans of heavy-metal music (and other popular movements) often dress a certain way, advertise their favorite bands on tee shirts and bumper stickers, and organize social networks around the music and the performers. The musicians themselves, along with other members of their inner circle, often parlay their high status into money and the sexual interest of “groupies”; there is a strong component of status-striving and mating competition involved. The actual enjoying-the-music part is only one part of the phenomenon, and perhaps a relatively unimportant one with respect to understanding many aspects of the heavy-metal world. My evolutionary-psychological theory of religion will have much in common with this example.

Finally, a proper understanding of these various phenomena in terms of the psychological mechanisms underlying them has considerable promise for developing more detailed hypotheses about what to expect in these behavioral domains. Psychological mechanisms involved in political behavior—for example, those related to status competition, reciprocal altruism, and coalitional psychology—represent sets of inferential rules that individuals use in thinking about and producing such behavior. If we understand the rules by which these mechanisms operate, we will be in a better position to predict such behavior.

In short, behaviors and inclinations that seem clearly to be “socialized” or “learned” at one level of analysis can be seen as founded on an evolved psychological architecture that enables and shapes these phenomena. Evolutionary psychology offers the theoretical framework for addressing these questions, with the potential for constructing a fully integrated model of nature (evolved psychological architecture) and nurture (specific details acquired via instruction, individual learning, and socialization). For these reasons, I believe it has the potential to be a powerful organizing framework for the psychology of religion.

**Attachment Theory in Modern Evolutionary Perspective**

Despite three decades of research, Bowlby’s basic outline of the operation and function of the attachment system in infancy remains almost entirely intact. The principal patterns of individual differences documented in infants and young children, and the patterns of parental caregiving thought to be partly responsible for them, remain
essentially unchanged. However, evolutionary theory has led some researchers to reconceptualize the nature of these individual differences to some extent, with respect to the questions of exactly why and how the evolved design of the attachment system produces them. Before moving on to discuss other evolved psychological systems, I briefly review some of these developments and speculate about their potential implications for the psychology of religion.

Attachment and Reproductive Strategies

One new perspective brought by evolutionary thinking is the suggestion by several theorists that infant attachment styles are related in important ways to adult mating and reproductive strategies. For example, Belsky, Draper, and Harpending (1991) proposed a lifespan developmental model designed to tie together the evolved systems of attachment, parental caregiving, and mating. They distinguished two broad life-history strategies in humans: a quantity strategy, which in effect amounts to “reproduce early and often,” and a quality strategy, which involves delaying reproduction (until more experienced and more able to care for offspring), having fewer offspring, and investing heavily in those offspring (the “all your eggs in one basket” strategy). The latter links together the traditional “normative” story with respect to the three systems: high quality parental caregiving (including father-presence vs. father-absence) leads to secure infant/childhood attachment, which is associated with long-term mating and subsequently high parental investment in one’s own offspring. Conversely, experience of low quality or quantity of caregiving leads to insecure attachment, which in turn leads to short-term mating and low parental investment in one’s own offspring.

The reproductive-strategies approach offers a new perspective on the nature of individual differences in adult romantic attachment styles. From this vantage point, such individual differences may be reflections, at least in part, of different reproductive or mating strategies. I have reviewed elsewhere a variety of research findings consistent with the notion that the secure adult attachment style may largely reflect a long-term mating orientation and the avoidant style(s) a short-term mating orientation (Kirkpatrick, 1998).

This reproductive-strategies (RS) hypothesis provides a basis for expanding the correspondence hypothesis in several interesting directions. First, many central beliefs in Christianity can be placed under
a rubric such as “family values.” To the extent that measured individual differences in romantic attachment styles (in part) reflect variation in reproductive strategies, we would expect to find this entire “syndrome” of family-oriented Christian views to be associated with secure rather than insecure attachment. That is, people with certain kinds of early attachment experience tend as adults both to be oriented toward “quality,” long-term reproductive strategies and to agree with, and be attracted to, moral and religious belief systems supportive of such values. This hypothesis also suggests an explanation for some other findings in the empirical research literature, such as the positive correlation between religiousness and marital satisfaction and some of the widely documented sex differences in religiousness.

**Love Revisited**

Although there is little doubt about the adaptive function of attachment in infancy and childhood, the function of the system in adulthood has been the subject of much debate. Some researchers have suggested that the nature and function of the system remains the provision of security, comfort, and protection, whereas others suggest that the function of attachment in adulthood is qualitatively different from that in childhood. In adulthood, they argue, attachment is the “tie that binds” adult romantic partners together. In other words, it is essentially what we call “love.”

The nature and function of love, both between adult romantic partners and between caregivers and their offspring, pose interesting questions for an evolutionary approach. One particularly useful perspective, I believe, comes from Frank’s (1988) theory of social emotions as commitment devices. This is a very general model that is useful for thinking about the respective roles of emotions and rationality from an evolutionary perspective. We tend to think of emotions as interfering with rational problem-solving, but Frank’s view suggests the opposite: In many cases, the cold and calculated solution that seems most attractive in the short run—the one that would be chosen by an entirely rational decision-maker—will not be in one’s best interests in the long run. For this reason, he argues, natural selection has fashioned various emotions to “commit” us to long-term strategies that are adaptive in the long run.

The “commitment problem” to be solved by the emotional bond of love, according to Frank, is like that solved by a lease between
renter and landlord. No matter how long one searches and evaluates the mate (or apartment) market in choosing a partner, there is always the possibility of a more attractive alternative coming along later. What is needed is a mechanism that kicks in and says, “This one is it—stop looking!” Note that love plays a similar role in parental caregiving, which presents the commitment problem of investing in offspring despite—as any parent will tell you—many temptations to quit.

Some aspects of religion may therefore resemble falling (or being) in love, as noted previously, precisely because it is falling in love. That is, the biological/psychological mechanism designed to activate love—in the service of cementing pair-bonds in committed mating relationships, for example—may be activated by a perceived relationship to God (or Jesus, etc.). This is consistent with other findings, such as the increased likelihood of conversion in adolescence—a developmental period during with the romantic-love mechanism emerges as an active system (for good evolutionary reasons)—and the fact that the conversion experience is so emotionally compelling. The latter makes sense particularly in the conversions of people with insecure attachment histories, for whom the experience is likely to be that of falling in love for the first time. This perspective also opens the door to a variety of ways in which research on romantic love in social and personality psychology might be applied to the study of religious change and conversion: For example, the distinction between falling in love “at first sight” versus love that grows slowly over time may reflect some of the same underlying processes as the long-acknowledged distinction between sudden and gradual religious conversion in the psychology of religion.

Finally, if the conversion process really does involve activation of a love mechanism, which in turn is connected to systems related to reproductive strategies, then sudden religious conversion may involve activation of the entire suite of mechanisms related to the “quality” reproductive strategy, including a long-term mating orientation and commitment to parental investment. Individuals whose pre-conversion life was characterized by the “quantity” orientation might then be expected to evince a variety of life changes related to the shift from this quantity to quality orientation. We would expect to see, for example, a renunciation of the previous high-risk lifestyle in favor of a new, conservative one—as described in the preceding section, an adoption of a “family values” orientation. Many such effects are
amply documented among religious converts: Substance abusers give up their habits; criminals “go straight”; the promiscuous settle down.

Religion: Adaptation or Evolutionary Byproduct?

Apart from explaining why the attachment system exists and operates as it does, I have so far said little about the role of an evolutionary approach to religion. I now will finally make explicit the general argument that until now has been largely implicit: There is no unique religious instinct (or, in contemporary terminology, no evolved psychological mechanism or system) designed specifically for the purpose of producing or guiding religious thought or behavior. Rather, I propose that religious beliefs are constructed, shaped, and maintained by a host of psychological mechanisms and systems—including the attachment system—that all evolved much earlier in the (pre)history of our species for more mundane purposes, but that have been “co-opted” in more recent human history in the service of religion.

Is There a Unique Religious Instinct?

Before turning to the reasons why I think we should not assume the existence of a “religion instinct” or evolved religion-specific mechanism, let’s first ask why we might find the idea persuasive in the first place.

The apparent universality of religion across time and cultures seems to suggest the role of a species-universal instinct or psychological system responsible for producing it. However, the degree to which religion really is “universal” depends largely on how one defines both religion (i.e., broadly or narrowly), and universal (e.g., always observed in all individuals? usually observed in some individuals?). Second, a crucial distinction is to be made between universality of expression—the behaviors, feelings, thoughts, and so forth of religious experience—and the universality of the psychology underlying it. Examining the ethnographic record for observable signs of religion focuses on the products, not the psychological mechanisms, and the mapping isn’t necessarily isomorphic. Cooking is pretty much universal across human societies, but it is doubtful that we have an evolved cooking mechanism. Some behaviors and ideas attain widespread or universal status because people the world over “figure out” similar solutions to the same problems.
Some writers have suggested that the existence of some kind of innate predisposition toward religion is indicated by the fact that religiosity seems to be at least partly *heritable*. This argument is problematic first because such correlations might be caused by some correlated personality trait or other heritable characteristic rather than religiosity itself. Second, and more important, demonstrating that individual differences in something are partly explained by genetic factors is quite a different thing from demonstrating that the thing itself is an *adaptation*. Individual differences frequently represent random noise, at least insofar as natural selection is concerned. Natural selection tends over time to reduce variability in traits, as less adaptive variations are weeded out and the more adaptive ones retained. The genetic variation with which we are left is, from an evolutionary perspective, largely the variation that doesn’t matter, as in iris color or height within the normal range.

Evidence from neuroscience has accumulated rapidly in recent years, leading numerous researchers to suggest that the brain contains something like a specialized “God module.” For example, epileptic seizures in a particular region of the temporal lobes are known to produce intense, spiritual experiences, and many people who experience them subsequently become preoccupied with religious and moral issues. However, the fact that activation in a particular brain area produces a consistent set of effects does not necessarily mean that we have located a mechanism designed for the function of producing those effects. For one, the effects could be merely incidental byproducts of the architecture of some other system designed for entirely other functions, as when tapping the right spot on your knee with a hammer reliably causes your lower leg and foot to jerk upwards. Second, it is possible that such effects represent a kind of *malfunction* caused by any number of possible genetic, pharmaceutical, or environmental factors. Getting whacked severely on the head with the aforementioned hammer might cause you to hallucinate stars whirling around one’s head, but this would not imply that our brain architecture includes an adaptation designed to produce this particular effect. Temporal lobe epilepsy presumably represents a kind of brain malfunction, not an adaptation. If we do not regard temporal lobe seizures as an adaptation, why should we regard “spiritual experiences” produced by them as such? Averill (1998) suggests that such experiences might be analogous to anxiety attacks, in the sense of reflecting hyper or mis-activation of an evolved system that ordinarily is highly adaptive.
Problems with the Religion-as-Instinct View

The first problem in trying to make the case for a religion-specific psychological mechanism is that of identifying what exactly such a mechanism would do. What would be its adaptive function? Making such a case well is much more difficult than it sounds, and there are a variety of pitfalls that must be avoided. For example, apparent psychological benefits (e.g., reducing anxiety or fear of death) must translate, directly or indirectly, into reproductive advantage (i.e., inclusive fitness) relative to alternative mechanisms. Second, the benefits cannot be explained simply in terms of benefits to “the group” or “the species,” which reflect obsolete notions of how natural selection works. Third, to make the case for a religion-specific psychological mechanism, one needs to demonstrate how it reliably and predictably produces benefits that, on average, exceed potential costs. A simple mechanism for mindlessly conforming to group norms, for example, is unlikely to evolve because it would be subject to exploitation by nefarious others in countless ways.

The central distinguishing feature of an adaptation is that it demonstrates evidence of “special design,” that is, has the hallmarks of a well-engineered solution to the adaptive problem it is designed to solve. In particular, adaptations are identified by evidence of such characteristics as complexity, economy, efficiency, reliability, precision, and functionality. A useful approach is to examine a purported adaptation from the perspective of an engineer, and ask whether the mechanism is well designed, in light of constraints imposed by other aspects of the organism’s design. Frankly, I find it difficult to imagine how religious belief or experience could be considered an economical, efficient solution to any particular adaptive problem. Moreover, adaptive functions attributed to religion often could be easily solved by much simpler mechanisms or designs. For example, if “feeling better” were universally adaptive, natural selection could simply have fashioned humans to feel better all the time. We know that it has managed to fashion a much more complex set of emotions that cause us to feel better and worse at different times; it would require only a very simple change in design to turn on the feel-good button perpetually.

Religion as an Evolutionary Byproduct

Up to this point our discussion of natural selection and evolutionary psychology has focused on adaptations: features or traits designed by
natural selection for a particular adaptive function. However, it should be obvious that not every feature, trait, or behavior observed in people is the direct product of an adaptation designed for that particular purpose. Our evolved psychology does not contain mechanisms designed for computing sequences of prime numbers or playing soccer. Adaptations are only one product of natural selection, but there are many others. Most important for our purposes is the class of byproducts of adaptations. For example, spandrels refer to features that have no adaptive value in themselves, but happen to emerge inevitably from the construction of adaptive features. One of Stephen J. Gould’s favorite examples is the human chin, which appears as a function of the design of the lower jaw in conjunction with other facial features which do reflect adaptations (for biting and chewing, smelling, and so forth). Exaptations refer to features that evolved initially as an adaptation to perform a particular function, but later come to take on a distinctly different function. Gould’s favorite example here is the “thumb” of the panda, which is a wrist bone that initially evolved as part of the wrist design but with a little additional modification has become a thumb-like organ useful for stripping leaves from bamboo shoots.

The attachment theory approach to religion I have sketched so far has been, implicitly, a religion-as-evolutionary-byproduct explanation, according to which the attachment system is one particular adaptation in humans that has been coopted by many religious belief systems. Many ideas about God activate the cognitive machinery of the attachment system, which processes the ideas in attachment terms. As a consequence, people often perceive their relationships with deities functionally in terms of attachment relationships, monitoring their sense of felt security and acting toward these deities accordingly. They use these deities as a haven of safety in times of fear and distress, and as a secure base in the absence of fear and distress. We do not have an evolved God module or psychological system whose adaptive function is to cause us to think about gods in this way. Instead, we have an evolved module or psychological system whose evolutionary function was is to promote survival of helpless offspring, which is designed to monitor parental caregiving and availability in relation to current circumstances and guide behavior accordingly.

In discussing evolutionary byproducts, Pinker (1997) refers to music as “auditory cheesecake”—the idea being that most of us find cheese-
cake wonderfully delicious because it capitalizes on our evolved preferences for sweets and fats. We do not have an evolved mechanism dedicated to preparing or seeking cheesecake; instead, the invention of cheesecake capitalized on those preexisting mechanisms that evolved for noncheesecake purposes. Cheesecake is exquisitely designed (by humans, of course, not by natural selection) to maximally titillate these evolved taste-preference mechanisms. In short, I think religion is a kind of socio-emotional-cognitive cheesecake.

The power of cheesecake is that it is well designed to titillate at least two distinct taste-preference mechanisms—specifically, preferences for both fats and sweets. The power of religion, I submit, is analogous. Religious beliefs activate attachment processes but also many other psychological processes as well, and it is probably this combination that is responsible for its widespread success and staying power. Moreover, this diversity of psychological underpinnings enables religion itself to be shaped in different ways that are maximally well suited for appealing to different cultures or different people at different times. To abuse the analogy further, consider the fact that there are many different kinds of recipes for making cheesecake: some varieties of cheesecake are sweeter than others, some creamier than others. One could even make low-fat cheesecake by making a few crucial substitutions. Some of these varieties are prized especially by people with a sweet tooth; the low-fat varieties are valued by people on diets. It is all cheesecake, but different components can be played up or toned down to suit the particular preferences and values of the consumer.

I think religion works in much the same way: Some religions such as Christianity—and particularly certain variants, such as evangelical and charismatic traditions—emphasize the image of deities as attachment figures; other religions emphasize other themes. Likewise, within any given religious tradition, individual-difference variability in religious beliefs and values owes something in part to the ability of people to pick and choose those aspects of the belief system that strike them as most plausible, valuable, or important in light of their own personal experience. The power of religion is attributable, at least in part, to the fact that there is “something for everybody.” What evolutionary psychology brings to the table is a framework for determining what those particular somethings are and how they work.
Beyond Attachment: Religion and Other Evolved Psychological Mechanisms

The theory of attachment and religion can now be seen as just one example of a psychological system, evolved for non-religion purposes, of which certain forms of religious ideas and behavior emerge as byproducts. Its privileged status in my book derives only from the fact that it is the system on which much of my own research has focused; I make no claim that attachment is more important or central to religion, in any general way, than various other systems to be introduced next.

Power, Status, and Introsexual Competition

Dominance hierarchies of one form or another are clearly evident in species from crickets and crayfish to chimpanzees (and humans). In the simplest (and perhaps most common) case, status is determined by physical size and strength. Larger and stronger individuals defeat rivals in combat, or actual fighting is avoided when the weaker sizes up the other and defaults by submitting or fleeing. In humans, an alternative path to status is related to prestige, which refers to status that is freely conferred by subordinates who hope to learn and benefit from the target’s recognized skills, abilities, or knowledge. Consequently, prestigious individuals are honored and revered, rather than feared, by subordinates. Both forms of competition are evident in religion.

The influence of dominance/status mechanisms in God beliefs is consistent with a variety of observations about worship behavior common to many religions, including Christianity. For example, Burkert (1996) observes that behavioral expressions of veneration and submission common in religious worship, such as bending, bowing, kneeling, and touching one’s head to the ground, have much in common with human surrender displays (i.e., in warfare), as well as with the submissive displays of lower-ranking individuals toward higher-ranking ones in many other primate species. Beliefs about God as powerful and controlling are consistent with a conceptualization of God as a “big chief” or the ultimate king. In polytheistic belief systems ranging from African traditional religions to the more familiar pantheons of classical Rome and Greece, the gods invariably are perceived as displaying a status hierarchy (or multiple hierarchies) amongst themselves, with one god reigning supreme over the others.

Apart from the gods themselves, religious institutions—like many other human cultural institutions—are at least in part social hierarchies
of status, power, and dominance. The roles of shaman, priest, medicine man, and so forth in preliterate societies are important power positions that command respect and awe from other group members. Burkert (1996, p. 93) refers to these perceptions of religious leaders as the “other side” of submission in religion. Given the diversity and complexity of ancestral environments and social structures, it seems reasonable to assume that humans have evolved mechanisms for identifying experts in their respective domains and treating them as leaders within those domains. And one such domain that represents a recognized area of expertise in most if not all societies is that of religion (and related domains such as magic).

It is worth noting in passing that this is one domain in which an evolutionary approach suggests hypotheses about potential sex differences in religious belief. Parental investment theory predicts that men should on average be more concerned with issues of power, status, and dominance and the negotiation of such hierarchies. This may explain why the power positions of shamans, priests, and so forth have long been held most commonly by men, as well as the fact that more recent liberalizing efforts—such as according the status of priesthood to women—often evoke strong opposition. Several studies show that boys are more likely than girls to view God as a supreme power, forceful planner, and controller.

**Kinship**

Kin selection is one of two general evolutionary theories widely recognized to explain the evolution of *altruism*—behavior that benefits others at (usually) some cost to the self. Anthropologists have long appreciated the importance of kinship and recognized it as a crucial set of issues in all societies. In psychology, however, the topic of kinship has received surprisingly little research attention. The importance of kinship psychology for understanding religion, however, is evident in a variety of ways.

One way in which kinship psychology is manifest in religious belief is with respect to beliefs about the dead, and particularly one’s ancestors. A belief in the immortality (in some form or another) of the dead occurs in all cultures as does the worship (again, in some form or other) of ancestors (Steadman, Palmer, & Tilley, 1996). Deceased ancestors are typically seen to have rather typical kin concerns, such as “continuance of the line” and the expectation that living relatives will seek vengeance on their behalf if they had been wrongly killed.
The idea of God as a parent, discussed previously, is often expressed directly in kinship language, as when God is addressed or referred to as “Our Father.” This is where kinship psychology—in particular, parental investment—and attachment theory converge: For God to serve effectively as an attachment figure, we must assume that God is deeply interested in us and our welfare.

Batson (1983) observed that prosocial behavior is enhanced by the use of kinship imagery for this reason, particularly in the context of religion. Worshipers often refer to one another as “brothers and sisters” as do monks and nuns; religious ethics promote “brotherly love”. The reason these linguistic tricks are effective is presumably that they activate kin mechanisms and motivate mutually altruistic behavior. The worship of ancestors may be another way of accomplishing the same trick as other “kin-talk.” Identification and reverence or worship of ancestors makes salient the group’s shared ancestry, with the implication that group members are all relatives (Steadman et al., 1993). Similarly, the related phenomenon of totemism, in which an animal or other natural object is recognized and revered as symbolic of the clan, may function in the same way. Like ancestor worship, totemic beliefs have the effect of making salient the relatedness among group members by virtue of common descent.

Reciprocal Altruism and Social Exchange

The second well-established evolutionary theory of altruism is that of reciprocal altruism. In short, it is adaptive to behave in a way that benefits another if, in exchange, the benefit will be returned at a comparable level: “You scratch my back and I’ll scratch yours.” The principal threat to reciprocal altruism is the counterstrategy of cheating. This is what prevents pure, indiscriminate altruism from evolving in a way that would otherwise be “good for the group”: An individual (and his or her genes) can be wildly successful by enjoying a free ride, taking the benefits of others’ do-gooding without incurring the costs. Therefore, if mechanisms coding for reciprocal-altruism strategies are to evolve, other mechanisms devoted to the task of identifying cheaters must co-evolve along with them, as well as motivational and behavioral systems for responding to and punishing such wrongdoing. The physiological and affective components of anger are clearly universal human responses to perceptions of having been “done wrong” in some way.
Perhaps the most common theme in people’s perceived relationships with gods, from so-called primitive religions to modern-day Christianity, is that of some form of reciprocity. Virtually everywhere, people hope to receive benefits of various sorts from the gods, in exchange for which they assume they must meet certain obligations. A reciprocally altruistic relationship with God, however, poses a unique problem: What could humans possibly offer in exchange that would be of any value to God? (Talk about someone who is difficult to shop for!) People have pushed their creativity to its limits in trying to figure out what the gods want, from gifts, monuments, and sacrifices to submissive behavior to doing good deeds.

Of course, the assumption is that “if we please the gods—with sacrifices, food offerings, or prayer—we expect to be rewarded with military victory, good harvests or a ticket to heaven” (Ridley, 1997, p. 131). If we fail, however, the consequences are invariably expected to be dire. Taking the benefits without meeting those obligations is, in effect, to cheat the gods, who in turn would be expected to become enraged and exact some form of revenge and/or punishment. In many cases such understood agreements take the form of a formal agreement or covenant, as in the Old Testament.

Most religious belief systems include reference to, if not emphasis on, ethical rules and norms. And despite considerable cross-cultural variability, certain moral precepts appear to be universal. Perhaps most evident among these are ethical mores reflecting the principles of reciprocal altruism, fair social exchange, and the detection and punishment of cheaters. Virtually all such codes, from Christianity to Confucianism, include some variation on the Golden-Rule theme “do unto others as you would have them do unto you,” which is about as explicit a statement of reciprocity as one could hope to find. Numerous theorists have argued that morality is largely a direct outgrowth of evolved mechanisms designed to promote mutualism or reciprocal altruism. Conversely, moral systems (including religious ones) typically deal with the issue of retribution or retaliation against wrongdoers. The idea of “an eye for an eye” seems to go hand-in-glove with the Golden Rule, and similarly appears a fairly direct reflection of the same reasoning. In this way ethical systems, including religious ones, reflect our evolved patterns of reasoning about social exchange.
Coalitional Psychology

Another central feature of our evolved psychology, one shared with many of our primate cousins, concerns coalitional psychology. In short, our evolved psychology appears to contain a suite of mechanisms for distinguishing the good guys from the bad guys, or the ingroup from the outgroup, and then giving preferential treatment to the good guys. In chimpanzees, shifting coalitions and alliances are a crucial factor in determining dominance hierarchies; the alpha male is not necessarily the biggest and strongest, but rather the one most successful in recruiting others to his cause and maintaining loyalty among his collaborators (which include both males and females, incidentally). When allegiances shift, so do leadership and dominance. In humans, these mechanisms operate with remarkable speed and efficiency, as demonstrated in many classic social-psychology studies and more recent work related to social identity theory.

Shared religious beliefs and labels define ingroups, and fellow ingroup members receive preferential treatment vis-à-vis outgroups. Shared beliefs and interests help to cement the ties within smaller, homogeneous tribes and villages, or within subpopulations within larger, heterogeneous societies as in the modern West. The psychology of religion provides numerous examples of ways in which religious groups may serve this function, with religious fellowships providing a sense of community and belonging among parishioners. Recruitment methods of religious cults illustrate the theme by targeting the lonely and disaffiliated and the use of “love bombing” and other techniques to quickly make recruits feel valued as group members.

The darker side of coalitional psychology, of course, is that favoritism toward ingroup members necessarily entails the opposite treatment for outgroup members; they are two sides of the same coin. There can be little doubt that although religious group affiliations can have positive effects on self-esteem and intragroup cooperation, it also has a long history of fostering hatred and conflict. I won’t insult the reader’s intelligence by providing a lengthy list of bloody conflicts promoted and/or perpetuated by religion.

Perhaps the oldest and most vexing question in psychology of religion is how religious traditions that preach brotherly love can simultaneously be a source of such hatred and warfare. In one sense there really is no paradox, because the prescription to “love thy
neighbor” typically applies only to real neighbors—that is, other members of one’s ingroup. Similarly, the much-studied relationship between religion and various forms of prejudice can be understood from the perspective of coalitional psychology. Indeed, well before his introduction of the intrinsic-extrinsic distinction, Allport (1954, p. 449) concluded that “bigotry enters only when religion becomes the apologist for in-group superiority and overextends itself by disparaging out-groups for reasons that extend beyond deviation in creed.”

The Cognitive Origins of Religious Belief

I have discussed how a diverse collection of psychological mechanisms or systems, evolved for guiding social behavior in various ways, lies beneath religious thinking. However, we eventually need to confront a more basic issue, which is how such beliefs can get started in the first place. Attachment theory explains nicely why beliefs about personalized deities tend to take certain forms, for example, but cannot explain why people find the idea of God or other supernatural phenomena plausible to begin with. Moreover, a comprehensive framework for understanding religion must be capable of explaining religious belief systems not characterized by personal gods, and should be able to explain the origins and (cultural) evolution of religious beliefs over human history, beginning with historically ancient religious or proto-religious beliefs. To this end I now review some recent evolutionary perspectives on the cognitive origins of religious beliefs that may shed light on how this might have occurred, and that provide the psychological foundation for the more specific forms of beliefs discussed previously.

Evolved Mechanisms for Thinking about the Natural World

Humans (like only some other organisms) evolved in a highly social environment in which, due to a species-universal evolved psychology, the behavior of other people was at least somewhat predictable and stable. It makes good sense then that humans have evolved a suite of psychological mechanisms that reflect recurrent and predictable properties of their physical and social worlds, as they related to adaptive problems of survival and reproduction.

Much research now demonstrates convincingly that children are aware of a variety of basic principles of physics at a much younger
age than can reasonably be attributed to direct experience and logical inference. Even infants appear to be able to distinguish animate from inanimate objects, presumably based on cues about motion and behavior. For example, objects that display self-propulsion, or whose trajectories of motion defy expectations about inanimate objects, appear to be classified differently by infants as young as three months of age. Humans appear to come equipped with innate knowledge and inferential reasoning mechanisms that have been referred to alternatively as naive (or folk) physics.

A second body of research on cognitive development amply demonstrates that very young children understand the ontological difference between living and nonliving objects and reason in fundamentally different ways about them. Further, they readily understand that various “living kinds” differ among themselves in fundamental ways, and distinguish between deep and superficial differences among types. At the heart of reasoning about living kinds appears to be the implicit assumption that each species or group is characterized by a sort of Platonic ideal, a phenomenon referred to as psychological essentialism. One can bleach a tiger and sew on a mane, but even second-graders understand it remains a tiger and does not thereby become a lion; its essential “tigerness” has not been altered. There is some kind of essence of tigerness and lionness that makes tigers and lions fundamentally different at a deep level. Humans seem to come equipped with certain “innate” knowledge in the realm of naive biology.

A third well-established category of innate reasoning mechanisms concerns naive psychology or theories of mind, by which they interpret other people’s behavior in terms of beliefs, desires, and other (unobservable) mental states. As summarized by Boyer (1994, p. 110), such “belief-desire psychology” is “a set of tacit principles and expectations which govern our understanding of mental phenomena and observable behavior... do not constitute a full-blown psychology... but form the basis on which subjects construct all ordinary causal attributions.” Of course, such theories of mind, once in place, guide our thinking about other people throughout the remainder of our lives; we are all amateur psychologists.

Interestingly, it does not take much to activate a theory of mind inappropriately in regard to mindless things. In a classic experiment, adults as well as children readily described animated movies of geometric figures in terms of beliefs and desires of these objects—for example, that one was chasing or trying to escape from another.
Guthrie (1993) reviews a variety of studies of this type as well, demonstrating the general principle that people readily interpret the behavior of non-human objects as if they had human feelings, emotions, and goals. If you have doubts, just think about the last time you cursed at your computer.

The Psychology of Complex Thinking: How the Mind Works

The Swiss-army-knife model of the human mind, as a collection of numerous domain-specific mechanisms each designed to solve mundane problems of survival and reproduction in ancestral environments, may seem intuitively not to square with everyday experience and observation. How does one get the human hallmarks of creativity and flexible intelligence out of highly domain-specific psychological mechanisms? In his extraordinary book, from which I borrowed the title of this section, Pinker (1997) provides the most comprehensive explanation to date of “how the mind works.” Combining the latest work from the recent explosions of both cognitive neuroscience and evolutionary psychology, Pinker discusses many ways in which complex reasoning and behavior are created by cobbbling together and exchanging information between simple mechanisms designed to solve simple problems, and/or applying mechanisms designed for reasoning about one kind of problem to a new kind of problem. “Higher” forms of complex thinking and reasoning are constructed from innate psychological mechanisms for reasoning about the physical, biological, and psychological world, along with processes of language understanding and acquired knowledge about the world.

Pinker identifies the principal trick of complex thinking as the use of analogy and metaphor—that is, the application of inferential modules to tasks outside the particular content domains for which they were intended. Mithen (1996) has similarly focused on analogical reasoning as a basis for an account of how evolution might have created modern minds. In both views, natural selection designed a highly modularized brain/mind comprising domain-specific mechanisms, each adaptive for (and thus activated by) particular problem contexts: one tool for each task. More complex thinking is the product of applying a particular psychological mechanism—or, more likely, a combination of mechanisms—to perform a novel task for which it was not specifically designed. A screwdriver is designed specifically...
for tightening loose screws, but a little creative thought reveals that it can be used to pry apart two surfaces, dig a hole, scrape paint off a board, or, serve as a doorstop. Psychological mechanisms similarly can be drafted into service for purposes other than those for which they were primarily designed.

The Cognitive Building Blocks of Religious Belief

This idea that complex reasoning involves the application of evolved psychological mechanisms beyond the stimuli for which they were “designed” by natural selection can be applied to the fundamental building blocks of religious belief.

Most animate objects in ancestral environments were animals of various kinds, and most inanimate objects were not. However, situations abound in which brains misinterpret inanimate objects as animate. “All humans and many animals display animism: mechanics see tools as rebellious, runners see distant fire hydrants as dogs, horses see blowing papers as threats, and cats see fluttering leaves as prey” (Guthrie, 1993, p. 6). Chimpanzees have been observed engaging in angry threat displays in response to the onset of heavy rains, sudden strong winds, waterfalls, and rapid streams. However, they do not respond in this way to other forms of movement; for example, they do not seem to “interpret” a falling leaf or branch as if it were alive. Likewise, human gods are, to my knowledge, not typically invoked to explain why a thrown object eventually falls to the ground.

Animism—in the sense of belief in spirit beings—has long been regarded by anthropologists as characteristic of some of the earliest or most “primitive” forms of religious belief. Guthrie (1993) suggests an animistic bias is essentially built into our perceptual system. When confronted with ambiguous stimuli, it is generally safer to assume a higher level of complexity than a lower one. A hiker in the woods doesn’t have time to ponder whether the object just ahead is a bear or a boulder, or whether the object at his feet is a poisonous snake or a harmless stick. With respect to religion, then, it should come as no surprise that gods and spirits of the earliest known religions frequently are associated with environmental objects that appear to display self-propulsion or other characteristics that distinguish animate from inanimate objects, such as the sun, moon, and stars, and weather phenomena such as storms, rain, and wind. Although Guthrie never spelled out his safe-bet argument explicitly in evolutionary
terms, Atran (2002) has since done so. Atran argues that the evolved human agency-detector mechanism is designed to operate on a hair trigger, leading to frequent errors in attributing agency to inanimate objects or unseen forces influencing them.

The natural intuitions about inherent differences among living kinds and psychological essentialism permeate a variety of common themes in religious thinking. For example, a central defining aspect of religion, in the view of at least some researchers, concerns the imbuing of “sacred” or “holy” status to objects, thoughts, or people. The crucial psychological factor seems to be perception that something holy or sacred has a distinct essence that defines it as a different “natural kind,” and that is unaffected by superficial transformations. The belief among many preliterate peoples in “a hidden or secret force which operates silently and invisibly in things and persons that in some way especially powerful, impressive, or socially important” and that “resides in the tribal chieftain, in animals, plants, and rocks of a significant kind”—mana, as labeled by anthropologists (Smart, 1976, p. 29)—seems little more than a matter of making such implicit thoughts explicit. The widespread if not universal belief in life after death may also have its roots in psychological essentialism. Although the details of such beliefs vary greatly, from reincarnation to eternal heaven or hell, they always revolve around the core idea that some kind of internal essence (e.g., “soul”) of a person transcends physical form and continues to exist after death.

Perhaps the single most important domain among these “folk theories” for understanding religious belief is theory of mind, and the process of psychological anthropomorphism by which theories of mind are (mis)applied to nonhuman objects or creatures. Once a target is identified by the mind as human-like, and theories of mind whir into action, people assign the target desires, beliefs, motivational states, and emotions, on the basis of which they draw further inferences in regard to how they themselves should behave in interaction with these beings.

Indeed, to Guthrie (1993) religion is anthropomorphism. His explanation for the readiness to anthropomorphize is analogous to his explanation for animism: Given ambiguity as to whether an animate object is human or nonhuman, it is a “safer bet” to assume the higher level of complexity; it is usually better (i.e., less costly) to mistake an animal for a person than the other way around. In other words, anthropomorphism represents a kind of inevitable error resulting
commonly from the design of our evolved psychology (cf. again Atran, 2002). Evidence for the anthropomorphizing inherent in people’s reasoning about God has been demonstrated in the laboratory.

**Why Religious Beliefs Succeed**

The idea that religious beliefs represent analogical extensions of our evolved psychology seems straightforward, but raises some intriguing questions about how and why this happens. Of all the possible mechanisms that could be “misapplied” to new domains, for example, why are certain analogical forms of reasoning common and others rare?

The first kind of explanation involves calibration or bias in the design of evolved mechanisms. Although it may seem intuitive that natural selection would have designed psychological mechanisms to be as accurate as possible, this is not necessarily true. The important fact to keep in mind is that the criterion by which evolution determines what stays and what goes is not accuracy, but adaptiveness. Rabbits are designed to make a lot of Type I errors in determining when to run for cover; it is much more costly for a rabbit to mistake a predator for a benign rustling of leaves than the other way around. Ancestral rabbits with unbiased predator-detection systems did not become rabbit ancestors. The same is no doubt true for many other psychological mechanisms of both rabbits and people. The animistic and anthropomorphic biases discussed above illustrate this reasoning.

A second reason why religious beliefs stems from a characteristics of such beliefs themselves: According to Boyer (1994, 2001), religious beliefs are different from other kinds of beliefs in that they are (or involve the) extraordinary. Central to a religious belief are one or more strongly counterintuitive (“nonschematic”) aspects, in the sense of violating the kinds of innate knowledge and reasoning structures described earlier. Constrained by these culturally specific counterintuitive beliefs, people then fill in the gaps and draw further inferences based on other principles of intuitive physics, biology, and psychology. The most powerful ideas are those that achieve what Boyer refers to as a cognitive optimum: a combination of intuitive and counterintuitive beliefs that involves enough of the former to be plausible, but enough of the latter to be intriguing, exciting, and memorable. Numerous empirical studies by Boyer, Atran, and others have demonstrated that optimal balances of intuitive and counterintuitive beliefs are particularly attention-grabbing and memorable.
Beyond Religion: Other Forms of Thought and Belief

One problem in attempting to define religion is that however one chooses to do it, there are always grey areas around the edges: “Religion” shades into various other forms of thinking, belief, and experience that some definitions include and others exclude from consideration. A comprehensive theory of religion should be able to deal with such cases, as well as the fact that these pseudo-religious beliefs then shade into forms of everyday thinking.

One domain of phenomena that seem clearly related to religious beliefs in some ways is that of parapsychology and other supernatural beliefs. Consider, for example, claims about clairvoyance, ESP, and telepathy. First, one might note that psychological essentialism and beliefs about natural kinds (i.e., naïve biology) are immediately evident: the person with such abilities is believed to have some kind of special powers, abilities, or essence that makes him or her importantly different from the rest of us—as with beliefs about shamans, clergy, and other religious leaders noted earlier. Second, such beliefs typically reflect combinations of intuitive and counterintuitive ideas as discussed by Boyer with respect to religious beliefs. The ability to “see” the future (clairvoyance), or to move objects using “psychic energy” (telekinesis) involve violations of naive (and real) laws of physics; bringing people back from the dead (e.g., seances) involves violations of naive (and real) biology; reading others’ thoughts directly (ESP) involves violations of naive (and real) psychology. Apart from these nonintuitive claims, however, paranormal activities look entirely mundane: telekineticists simply bend spoons or “push” objects an inch or two along a table; they don’t transform spoons into pigeons.

Just as modern beliefs about a variety of paranormal phenomena shade into “religion” through a wide grey swath, these beliefs in turn shade into other, more mundane forms of everyday thought and commonsense reasoning. Research on everyday reasoning in social psychology has long focused predominantly on the problem of identifying and explaining errors in human information processing and “judgments under uncertainty.” Much of this research, like religion and other supernatural beliefs, is understandable from the perspective developed here. That is, because the brain/mind has evolved via natural selection in ways that, in ancestral environments, were adaptive—not necessarily accurate or correct—what is remarkable is not that people sometimes err on statistical or logic problems, but
rather that they can do them correctly at all. We have seen several reasons why systematic errors in reasoning are foreseeable, such as inherent biases in cognitive systems (e.g., paranoid rabbits) and mismatches between evolved mechanisms and modern environments (e.g., attempting to solve artificial problems designed by devious experimenters in the laboratory).

By the same reasoning, we might continue slipping down the slope and ask about forms of thought that are intended to be “unbiased” and “objective.” In particular, we might ask about science itself, which is the “form of thought” I have adopted in this book. Scientists, as people, are subject to the same kinds of cognitive biases as anyone else. The secret to science’s ability to succeed in better approximating objective truths about the world than other forms of knowledge lies in its methodology: The principles of experimental control, double-blind studies, statistical procedures for controlling extraneous variables, and so forth are designed to defeat the effects of the scientists’ own psychological shortcomings and biases.

Beyond Genes: Learning, Rationality, and Culture

Up to this point, my religion-as-evolutionary-byproduct view has generally cast human thinking and behavior—and especially religion—as simply spilling out of our evolved psychology, like water running down a hillside. The peaks and valleys of the landscape represent, in this metaphor, our evolved psychology; religion is the water following the natural contours of the land, flowing down from the peaks and winding through the valleys (Atran, 2002).

In stark contrast, however, is an alternative perspective with a long intellectual history that views religion in precisely the opposite manner: as a cultural construction that has emerged in spite of, and whose function is that of opposing or constraining, our evolved psychology. Freud (1961/1927) was probably the most (in)famous proponent of this alternative view, arguing that civilization in general, including religion in particular, was fundamentally about taming our base animal instincts. A more contemporary (and evolutionarily more sophisticated) version of the idea was espoused by Donald Campbell (1975). In Campbell’s view, religious traditions reflect the experience and knowledge of many generations, accumulated via a lengthy process of trial-and-error learning, that function to keep our biology under control.
Most of what I have written here reflects the downhill metaphor, but I have mixed in a few examples more consistent with the dam metaphor without (I now confess) acknowledging having done so. “Kin-talk,” for example, was discussed as a gambit designed to induce altruism toward people who otherwise would be treated differently. The ethical systems inherent in most organized religions, as illustrated by the Ten Commandments and proscriptions against the Seven Deadly Sins, read like lists of base desires upon which, we fear, we will all be tempted to act unless prevented from doing so. Such examples pose an obvious problem for evolutionary explanations. Adaptationist hypotheses are clearly useful for explaining adaptive behavior, more or less by definition, but explaining maladaptive—that is, from a strict inclusive-fitness perspective—behavior requires additional work.

The short answer is that there is, of course, far more to explaining religion than evolution and genetic fitness. The causal path from genes to religion is a long and circuitous one, with many levels of analysis interposed in between. Although natural selection (and its criterion of reproductive success) is a distal or ultimate cause in the production of any behavior, many other proximal levels of analysis mediate the causal path from genes to behavior. Moreover, each of these levels operates according to different principles—that is, principles other than inclusive fitness—which produce behavioral choices according to criteria other than success in gene propagation. For example, individual learning and rational thinking lead people to behave in ways that they perceive to be beneficial to themselves as individuals, not their genes.

Numerous theoretical models have been developed, mainly by biologists and anthropologist, that attempt to combine and integrate the processes of biological (genetic) evolution with those of cultural evolution. Such models go by names such as gene-culture coevolution, multilevel selection, and dual inheritance. Although differing in many ways, such models are all in agreement that social learning and cultural transmission give rise to Darwinian-like processes in the selection of ideas and behaviors at the cultural level, in ways that sometimes parallel and sometimes diverge from processes of biological evolution at the level of genes. Evolution has given us a taste for cheesecake, but we can choose not to eat it if wish.
Summary and Conclusions

In this essay and the book it summarizes, I have tried to paint a large-scale “big picture” for the psychology of religion in broad strokes, and fill in the details for one (perhaps small) part of it regarding the attachment system. To close, I summarize what I see as some of the principal strengths of this approach and its potential value for organizing and guiding the psychology of religion in the future.

First, this approach to psychology of religion is unambiguously “psychology” first, and “of religion” second. Religion is a topic of investigation in the same manner as any other domain of cognition, affect, or behavior, and can be understood in terms of the same psychological and social processes that underlie other phenomena of interest to psychologists. Thus the approach promises to integrate the psychology of religion back into the mainstream of psychological science, from which it has largely been estranged in recent decades.

Second, as a broad paradigm, evolutionary psychology promises to provide an integrated approach to psychology, one that ties together its various subdisciplines (social, personality, etc.) in a coherent theoretical way. Because the topic of religion transcends these traditional boundaries, the psychology of religion must be based on a psychological framework that organizes and binds these various subdisciplines.

Third, the evolutionary paradigm promises to not only integrate psychological perspectives, but to integrate psychological approaches to religion with those from anthropology, sociology, political science, and other social sciences. Although each of these fields represents a level of analysis of religion different from psychology, each must be founded upon a clear understanding of human psychology. The ideal “scientific study of religion” must be truly interdisciplinary, not merely multidisciplinary, and a shared evolutionary perspective promises to provide a common conceptual framework and language to facilitate cross-disciplinary communication and collaboration.

Fourth, the perspective for which I have argued offers a coherent way to combine questions about normative processes in religion—for example, questions such as “Why are people religious?”—with questions about individual differences in religiosity. At least within psychology, researchers seem to have largely given up in recent years on the big questions about the fundamental (psychological) nature and origins of religious belief, choosing instead to focus on individual
differences on various religious dimensions and their correlates. Moreover, the evolutionary perspectives provide a strong foundation for conceptualizing, predicting, and studying empirically sex differences (or lack thereof) across different domains of religious belief and behavior.

Fifth, the evolutionary approach to religion, in contrast to most extant approaches that are mainly descriptive in nature, is at heart a functional approach. This is particularly important with respect to questions about motivation. Psychologists of religion have long been interested in questions of motivation, and have been quick to nominate candidate motivations for explaining religion: People are religious because it enhances their self-esteem, or creates meaning, or assuages their fear of death, and so forth. However, in the absence of a larger evolutionary framework, there is no basis for digging more deeply to ask why people would be so motivated. An evolutionary psychology of religion begins with a strong theoretical foundation for thinking about function, and then applies this functional perspective to religious phenomena of interest.

Sixth, given the complex and multifaceted nature of religion, religion researchers—like scientists studying any other complex phenomenon—have long sought a framework for analyzing the subject into smaller components to be examined separately. In the absence of any clear theoretical structure, such divisions tend to be fairly arbitrary, based mainly on salient observable features, superficial similarities and differences, and intuitive judgments. An evolutionary perspective provides a clear theoretical basis for “carving nature at its joints” in constructing an organizational scheme for the psychology of religion (or anything else). Rather than arbitrarily dividing religion into descriptive categories such as images of God, prayer, or causal attributions, it provides a means for dividing up the terrain in functional ways that are more likely to lead to theoretical progress.

Seventh, this approach serves to bring back into focus the content of religious belief. The so-called “measurement paradigm” in the psychology of religion has produced, to a large extent, a conceptualization of religious variability in terms of highly abstract dimensions, such as intrinsic-extrinsic orientation or spiritual development. Lost in these abstractions has been the details of what people actually believe. The specific content of beliefs dictates the psychological systems likely to be activated to process them and the kinds of
inferences likely to be drawn from them. An evolutionary psychology of religion would shift the focus away from abstract intellectualizations back to what religion is really about.

Eighth, evolutionary psychology offers the only coherent framework for conceptualizing the ancient nature-nurture debate which has crippled psychology (including the psychology of religion) from its inception. All human behavior is the product of both environmental input and specialized, evolved psychological mechanisms designed to process it. Religious belief and behavior are neither “in our genes” nor merely “in the environment,” but rather result from a combination of our particular psychological architecture interacting with specific environments. The evolutionary approach provides a framework for identifying both the psychological mechanisms and the environmental factors that interact with them to produce various forms of religious belief and behavior.

Finally, the approach outlined here avoids several pitfalls that have long proven to be stumbling blocks for the psychology of religion. For example, much psychology of religion has fallen into a deep definitional trap. In the absence of a strong theoretical (and particularly functional) foundation from which to start, researchers have tended to begin with observations and work backwards toward a theory to explain it. Such an approach would seem to necessitate that one clearly define the target of explanation before proceeding any further. However, the quest for an acceptable definition of the term religion itself has proved utterly intractable, leaving the field stymied. This problem need not arise if one begins from the perspective of theory: Armed with a host of hypotheses about the particular kinds of psychological mechanisms and systems that comprise the human mind, as well as clearly articulated theories about what these systems were “designed” to do, a researcher can begin applying these ideas to any particular topic of interest irrespective of whether it fits one or another definition of religion.

Attempts to escape this definitional trap have tended to lead researchers into another, measurement trap. A common solution to the complexity and diversity of religion (and hence its resistance to a simple definition) has been to dimensionalize it based on (mainly) factor-analytic work. The hope is that analysis of descriptive data on religion will produce a multi-dimensional framework that both defines religion empirically and provides a basis for construction of scales
to measure these various aspects. Whether dimensions so constructed actually relate empirically to psychological variables of interest is another question, the answer to which is often likely to be no. A strong theoretically based orientation, however, provides a basis for constructing measures designed specifically to tap the particular aspects of religious belief or behavior relevant to the psychological domain of interest.

The psychology of religion has been plagued from the beginning by extra-scientific evaluative assumptions: the *evaluative trap*. A central question of interest to many researchers concerns whether religion (or some particular aspect of it) is “good” or “bad” for people with respect to individual psychology, group functioning, or some other criterion. If I am correct about religion as a byproduct rather than an adaptation, then there is no a priori reason to expect it to be generally “good” or “bad” for people.

Related to the evaluative trap is the *veridicality trap*: The common but patently false assumption that if a belief can be understood scientifically—e.g., in terms of psychological processes—then the beliefs are themselves false. There generally is no reason why any scientific approach to understanding religion need assume that the beliefs under study are either ontologically true or false. The origins (psychological or otherwise) of a belief are logically orthogonal to the veridicality of belief; to infer otherwise is to commit the *genetic fallacy*. This holds true for any scientific approach to religion, whether evolutionarily grounded or not. However, I believe the evolutionary psychological approach outlined here offers an additional insight that may help us avoid the veridicality trap. Recall the argument that the human brain/mind was “designed” to be *adaptive*. It is decidedly *not* designed to be “accurate” or “correct” as judged by logical or other empirical standards, except insofar as accuracy is adaptive in a given domain. Once this is acknowledged, there is no a priori reason to believe that any particular kind of belief, whether religious or not, should be expected to be correct or incorrect. The mind is designed in such a way that, depending on any number of factors, it sometimes draws correct inferences and sometimes incorrect ones. An evolutionary psychology of religion addresses the question of why and how people come to hold (as well as reject, communicate, etc.) particular beliefs in which we are interested, irrespective of the question of whether they are true or false.
It is for these reasons that I believe evolutionary psychology provides a powerful metatheoretical paradigm for organizing all social-scientific research on religion. There is, however, one hitch in the plan: The field of psychology in general has yet to adopt the evolutionary paradigm as its own. Evolutionary psychology is certainly gaining in popularity, and it seems to me inevitable that it will eventually rise to become a leading, if not the predominant, paradigm for the field. Nevertheless, it is not at all clear how long this will take.

In the meantime, psychologists of religion can either wait for "the revolution," hopping on the bandwagon when it finally comes around, or they can go ahead and start moving in that direction and beat the bandwagon to the pass. The question is not whether evolutionary psychology will prove to be an important tool for the psychology of religion, but when. I say we might as well get started.

References


FROM LOVE TO EVOLUTION: HISTORICAL TURNING POINT IN THE PSYCHOLOGY OF RELIGION

Benjamin Beit-Hallahmi

ABSTRACT

Kirkpatrick’s contribution is evaluated in the context of historical developments and persistent crisis in the psychology of religion. The field has been characterized by the lack of a unifying theory, as well as by some literature being driven by religious apologetics. Kirkpatrick’s approach has been truly theory-driven, always seeking a general psychological framework for analyzing religion and religiosity. His personal odyssey led him to embrace Bowlby’s attachment theory, which has had a unique impact of research in academic psychology. But then Kirkpatrick demonstrates his honesty and courage in realizing that the attachment framework was less than adequate for the task of unifying the field. Instead, he invites us to join him in embracing the broader framework of cognitive-evolutionary theory, which should serve as the unifying framework for the field. I concur with his judgment.

First let me state that I have before me Kirkpatrick’s book, which I have read, and I can first assure you that the précis is indeed a faithful summary of the ideas expressed in the book by the same title. Reading the précis, however, is no substitute for reading the book itself, because only the latter contains many additional arguments and a great body of evidence to back them up. Kirkpatrick is great teacher, leading us step by step through his own examination of ideas and findings and patiently explaining how to get from one idea to the next. The writing is always clear and interesting, and the book is simply packed with information.

The book offers us a diagnosis and a solution to the crisis in the psychology of religion.

Kirkpatrick’s diagnosis is simple and correct: the lack of a general theory that would guide us in our research. The solution: Embracing the newly developed cognitive-evolutionary framework, which explains the appearance and acceptance of religious beliefs among humans, together with middle-level theories, such as attachment. Let me state that I find myself in broad agreement with Kirkpatrick ideas, so I want to support his plan of action, while disagreeing with him on some of his minor points.
In his densely argued book, Kirkpatrick reports on a personal odyssey, which turns out to be representative of recent and important developments in the psychology of religion. This voyage starts with the work of a British psychoanalyst, who more than fifty years ago created, single-handedly, one of the most influential theories in present-day research on personality development.

In this case, we can observe a remarkable historical turning point, showing how an idea coming from outside psychology conquers its mainstream. This has happened more than once in the history of academic psychology, with such outsiders as Freud, Piaget, and Chomsky serving as inspiration for academic psychology research. In the case of attachment, developments in psychoanalytic theories ended up having a massive impact on developmental psychology and personality psychology.

What has been known as the British school of psychoanalytic object-relations theory represents the psychoanalytic study of the nature and origins of interpersonal relations, and of the nature and origins of internal, unconscious, structures, deriving from interpersonal contacts and experiences. Present interpersonal relationships are regarded as reactivation of past internalized relations with others. Psychoanalytic object-relations theory theorized (or speculated) on the internalization of interpersonal relations, their contribution to normal and pathological personality development, and the mutual influences of internal fantasies and the reality of interpersonal relations. To the uninitiated, the term object relations theory is somewhat misleading, because the theory mostly deals with the elaborate and passionate internal world of the child (and its projection). Personality is formed through object relations patterns set up in early childhood, stabilized in later childhood and adolescence, and then fixed during adult life, and reflected in transference patterns. The functioning of adult personality depends on the maturity of one’s object relations.

Between 1930 and 1950, British psychoanalysts were involved in a major civil war between groups identified either with Anna Freud or with Melanie Klein. The war was about how we should think about the psychological world of the human infant. The war may still be raging on in some circles, but there was also the Independent Group, which stayed away from the Freud-Klein battles, and included such names as D. W. Winnicott, W. R. D. Fairbairn, and John Bowlby.
Bowlby was destined to chart a new and revolutionary course, and he is the only psychoanalyst whose ideas have been taken up enthusiastically by academic psychology, to become the cornerstone of a burgeoning field of research. While his psychoanalytic colleagues devoted their considerable brain power to speculating about the internal experiences of children by listening to adults, he offered a new framework for observing children and parents, beyond the confines of the mythological consulting room. In line with object relations theory, but with a new emphasis on panhuman experiences and innate tendencies, Bowlby’s attachment theory proposed that the infant’s early experiences with caregivers determined the internal working models (IWMs) that were central to individual personality formation. This was a third-generation psychoanalysis. If object relations theorists rejected the importance of the Oedipal stage (years 3–6) in favor of the pre-Oedipal first 2 years of life, Bowlby did not want to deal with anything erotic in the child’s early life. There were other priorities; firstly mere survival. The human baby is hard-wired, as we say today to seek a caretaker and find security as soon as it comes out of the womb. This search is either met with success, leading to a sense of security (in most cases) or fails with lifelong insecurity as a result.

Reading Bowlby, one realizes that he was first a psychoanalyst, and a true Freud scholar, but he wanted to combine psychoanalysis and evolutionary ideas, using the term ‘ethology’ in the 1950s. In his own words, his main departure from everything his colleagues stood for is as follows: “No variables have more far-reaching effects on personality development than a child’s experiences within the family. Starting during his first months in his relation to both parents, he builds up working models of how attachment figures are likely to behave towards him in any of a variety of situations, and on all those models are based all his expectations, and therefore all his plans, for the rest of his life” (1973, p. 369).

The notion of the internal working mode (IWM) was in line with earlier object relations formulations, but Bowlby’s attachment IWM includes beliefs about self-worth, about trusting others, and about closeness in intimate relationships. The mother’s sensitivity to the infant’s needs is a condition for the formation of a secure attachment. Security in attachment leads to competence, autonomy and sociability later on. The notion of the family as the secure base from
which the developing child is able to explore the world with confidence is central. Bowlby’s ideas, with his emphasis on ethology and the innateness of the baby’s clinging to a caretaker, drew much attention as soon as they were presented to the world in the 1950s. This was one case where a theory created by an outsider moves to the center of the academic world.

In the 1960s, a test measuring secure (or insecure) attachment in young children was designed. The Strange Situation (STS), where a child aged 12 months and above is separated, and then re-united with its mother, has been widely used to assess attachment patterns. Quite wisely and counter-intuitively, it is the child’s reaction when re-united, not when separated, which reflects security or insecurity. Secure infants seek contact or greet the parent at a distance with a smile or wave. Avoidant infants avoid the parent. Resistant/ambivalent infants either passively or actively show hostility toward the parent.

Later on, various questionnaire measures for assessing IWMs in adults were developed, independently of the STS which is only used with children before age two. Secure adults find it relatively easy to get close to others. Avoidant adults are somewhat uncomfortable being close to others, and Anxious/ambivalent adults may want to merge completely with another person, and this desire sometimes scares people away.

Since the 1980s, research correlating IWMs with a wide range of behaviors has been carried out by psychologists all over the world. Beyond developmental psychology, attachment has been correlated with employee behavior, political attitudes, leadership styles, and marital interaction, among other things. The term ‘attachment’ has become so fashionable that we now hear of attachment disorders and of various “attachment therapies” some of which should be approached with extreme caution. This merely indicates the extraordinary success of Bowlby’s theoretical framework and its unique impact.

Lee Kirkpatrick, seeking early on a new theoretical stimulus for the psychology of religion, has been the pioneer in applying attachment theory to religious behavior, and has devoted most of his professional career to it. His conceptual starting point was “. . . perceptions of having a personal relationship with a parent-like deity, can well be understood as manifestations of an evolved psychological system called the attachment system” (p. 16). Then, as we look at variations in early experiences and IWM formation, we can predict the resulting patterns of religious beliefs: “To the extent that religion really
does involve the activation and operation of the attachment system, individual differences in attachment experience should be related to individual difference in religious belief” (p. 125). Research has shown that individuals who described their mothers as cold and distant were more likely to have had religious conversions, and that such conversions should be viewed as a fantasy compensation for an attachment deficit.

At the group level, different parenting styles are related to cultural differences in religious beliefs: “One kind of parenting, by virtue of the (universal) design of the attachment system, reliably produces behavioral patterns of IWMs of one variety, which lead . . . to certain ways of thinking about God and the perception of some kind of God-beliefs as plausible and believable and others as implausible and unbelievable; another kind of parenting reliably produces a different pattern. Which kind of belief about God has the most staying power in a given culture depends largely on whatever particular attachment schemata are prevalent or normative in that culture, which in turn depends on the kinds of early attachment experience people typically experience in those cultures” (p. 125). Here we go back to the culture and personality school in anthropology, which carried out similar research in the 1950s, with fascinating results. The attachment approach specifies other behavioral antecedents and provides possibly more precision.

The question of cultural differences is one of the sore points in this book. Kirkpatrick believes that his research, carried out in the United States, which starts with believers’ fantasies about attachment to the image of “God” or “Jesus”, is somehow relevant only to Christianity. In this case Kirkpatrick is too modest, and sells the attachment framework, and his own work, short. Fantasies of personal relationship with a parent-like deity or supernatural agent can be found all over the world in all traditions. Love, devotion, and submission fantasies are commonly found in so-called “ancestor worship” systems, Buddhist systems, Hindu systems, or among the followers of Moses Berg or Jim Jones. Such patterns of submissive identification seem to be panhuman and must have grown out of our evolutionary history. Likewise, the phenomenon of what Kirkpatrick calls “family values”, following common United States usage, is not unique to Christianity.

Lee Kirkpatrick’s change of course as a researcher and thinker occurred when he discovered evolutionary psychology. What he realized then was not that attachment theory was wrong, but that it had
its limitations. Attachment could explain only some aspects of religion, while other aspects of religion “can be explained in terms of other (i.e. than attachment) psychological systems” (p. 16).

The appearance of the cognitive evolutionary study of religion has been the most important developments in the study of religion over the past two decades. The old psychology of religion started not long ago to include both general cognition factors and evolutionary traits in its lists of theoretical explanations (Beit-Hallahmi & Argyle, 1997). But what Kirkpatrick has done is to embrace the whole approach and to consider all its aspects.

From that point on he joined the evolutionary psychology movement, and the cognitive-evolutionary approach to religion. The basic argument of this approach is that religion results from the basic architecture of the human mind, and that is a by-product and not an adaptation. The question is that of the seeming plausibility of religious ideas to most humans and the uniform way spirits are perceived. The evolutionary argument is that beliefs in supernatual agents are by-products of a naturally selected cognitive mechanism for detecting agents in the environment. Hard-wired, basic cognitive systems of humans lead to perceptual errors because we can take no chances and always err on the side of caution. This has led to the universal phenomenon of animism.

Kirkpatrick argues that the cognitive-evolutionary approach is the comprehensive theory in the psychology of religion we have all been missing, because

\[ \ldots \text{this approach serves to bring back into focus the content of religious belief. The so-called “measurement paradigm” in the psychology of religion has produced, to a large extent, a conceptualization of religious variability in terms of highly abstract dimensions, such as intrinsic-extrinsic orientation or spiritual development. Lost in these abstractions has been the details of what people actually believe. The specific content of beliefs dictates the psychological systems likely to be activated to process them and the kinds of inferences likely to be drawn from them. An evolutionary psychology of religion would shift the focus away from abstract intellectualizations back to what religion is really about.} \]

Kirkpatrick explains that

Central to a religious belief are one or more strongly counterintuitive (“nonschematic”) aspects, in the sense of violating the kinds of innate knowledge and reasoning structures described earlier. Constrained by these culturally specific counterintuitive beliefs, people then fill in the
gaps and draw further inferences based on other principles of intuitive physics, biology, and psychology. The most powerful ideas are those that achieve what Boyer refers to as a *cognitive optimum*: a combination of intuitive and counterintuitive beliefs that involves enough of the former to be plausible, but enough of the latter to be intriguing, exciting, and memorable.

How can anyone describe religious ideas as “counter-intuitive”, while their universality shows that these concepts are actually natural and intuitive, and, much more intuitive than the ideas of physics, chemistry, or evolutionary psychology.

I think, and this is my main problem with the cognitive-evolutionary school, that it would be much simpler and more parsimonious to drop the concept of the minimally or optimally counter-intuitive, because those who use it also claim that it allows for just one violation of the intuitive and that assertions with more violations are going to be rejected. If this is the case, then it is clear that one violation is within the limits of our “natural” intuition, and that more blatant violations may (or may not) be rejected. If fantasies that are more than minimally counter-intuitive are rejected, then the minimally counter-intuitive equals the intuitive. Religious ideas are intuitively plausible and so are acquired by young children without much formal teaching. Ideas such as those in modern physics or chemistry are indeed counter-intuitive and thus beyond the grasp not only of children, but of most adults (They require not only formal teaching, but a high IQ, of course).

Let me now turn to some cases where I find myself in disagreement with Kirkpatrick’s statements.

1. “Related to the evaluative trap is the veridicality trap: The common but patently false assumption that if a belief can be understood scientifically—e.g., in terms of psychological processes—then the beliefs are themselves false. There generally is no reason why any scientific approach to understanding religion need assume that the beliefs under study are either ontological true or false. The origins (psychological or otherwise) of a belief are logically orthogonal to the veridicality of belief; to infer otherwise is to commit the genetic fallacy” (Kirkpatrick, this issue).

This has little to do with the concept of genetic fallacy in logic and debate. The *genetic fallacy*, as described by Cohen and Nagel (1934) is the logical error of accepting or rejecting a proposition
because of its source. An example would be the Ad Hominem Fallacy of raising irrelevant personal information about the person making a claim: “Don’t listen to Dr. Doe’s critique of evolution; he is a Christian Fundamentalist”. A similar argument would be the appeal to authority: “We should take seriously what Linus Pauling said about vitamin C; he won the Nobel Prize twice”. While Linus Pauling has been compared to Leonardo Da Vinci (and almost won a third Nobel) this is a red herring, an error of irrelevance. Arguments should be judged on their own merit, not on the merits of those who present them. If we want to respond to any critique of evolution theory or any claims about vitamin C we should weigh the evidence pro and con, and disregard what we know about their proponents.

2. “This holds true for any scientific approach to religion, whether evolutionarily grounded or not. However, I believe the evolutionary psychological approach outlined here offers an additional insight that may help us avoid the veridicality trap. Recall the argument that the human brain/mind was “designed” to be adaptive. It is decidedly not designed to be “accurate” or “correct” as judged by logical or other empirical standards, except insofar as accuracy is adaptive in a given domain. Once this is acknowledged, there is no a priori reason to believe that any particular kind of belief, whether religious or not, should be expected to be correct or incorrect. The mind is designed in such a way that, depending on any number of factors, it sometimes draws correct inferences and sometimes incorrect ones. An evolutionary psychology of religion addresses the question of why and how people come to hold (as well as reject, communicate, etc.) particular beliefs in which we are interested, irrespective of the question of whether they are true or false” (Kirkpatrick, this issue).

If, as Kirkpatrick states we should not assume that the beliefs under study are ontologically false, then what is the need for a cognitive evolutionary? If we did accept religion as a veridical representing of reality, there would be no need and no reason for psychological explanations. Those who believe in a divine revelation that created the beliefs in Ahriman and Hormuz, Zeus, or Jesus don’t really need a psychology of religion.

What a psychological theory of religion does, and what cognitive-evolutionary psychology of religion does particularly well, according
to Lee Kirkpatrick, is to show that what gives rise to religious beliefs are internal psychological processes, and not veridical perception of the outside world. What the theory states quite clearly is that all religious beliefs originate in evolved mechanisms of the human mind, whose last known address was the human brain. That is where beliefs about Ahriman and Hormuz, Zeus, or Jesus were created. Zoroastrians claim that Ahriman and Hormuz are out there somewhere, and their place of residence is not just the human brain. My Olympian neighbors say this about Zeus, and my Christian neighbors say the same about Jesus. The real veridicality trap is what you fall into if you do indeed try to look at the claims about supernatural agents proposed with great enthusiasm by spokespersons for 10,000 religions who make identical claims for our support and loyalty. What believers promote is not The generic-brand name tension.

This reading by Kirkpatrick of the cognitive-evolutionary approach would surprise most of its proponents and most of its critics. Among the latter we find religionists, who greeted the coming of this approach with weeping and gnashing of teeth (e.g. Bulkeley, 2003). Reading such authors as Atran (2003) or Boyer (2001) makes it clear that they consider all claims about supernatural agents to be perceptual errors and nothing more.

Kirkpatrick himself notes elsewhere in his précis that “Research on everyday reasoning in social psychology has long focused predominantly on the problem of identifying and explaining errors in human information processing”.

In an earlier discussion of ideological and personal approaches to the psychology of religion (Beit-Hallahmi, 1989), I described three separate traditions in the writings of psychologists about religion:

1. a religious psychology, which develops religious apologetics.
2. a psychology of religion, which focuses on the psychological explanation of religious phenomena.
3. a social psychology of religion, which studies the behavioral correlates of religiosity.

Religious psychology, number 1 above, is experiencing an unprecedented growth. We are deluged by offers of grants to study “spirituality” or teach “religion and science”. Apologetics is booming because millions of dollars are put into sustaining it.

In the life sciences, we know that drug company money fuels research to the tune of billions. In the human sciences, we are in
the minor league, so that, paradoxically, a (relatively) small investment can really create a huge impact. Through spending just a few millions, The John Templeton Foundation has created two new waves. One is the “science and religion” movement. The other one is “positive psychology”. By spending $40 million a year, The John Templeton Foundation may change the direction of research in some areas of psychology. Thus, the field of “positive psychology” has been created. This foundation is especially interested in religion, and is determined to change the way religion is studied in the academic world, and this includes psychological research. An excellent survey of the situation has been provided by Wulff (2003). Apologetics today is energized not just by money, but by a language of coping with cultural change. Instead of religion, we keep hearing about “faith” or “spirituality”, terms which are supposed to more attractive. Whenever you encounter these terms, ask yourself if anything is gained by using them, as opposed to the straightforward term religion.

Are those who use these terms trying to hide something by providing a more attractive packaging? It is clear to me that using “faith” or “spirituality” comes with added luggage.

In the United States, the current administration has been involved in “Faith based Initiatives”, designed to dismantle anything faintly reminiscent of the welfare state and strengthening religious organizations of whatever variety. Behind it is the assumption that putting public money into “faith” is good for capitalism. Karl Marx said that a long time ago, and he was probably right.

“Spirituality” is actually a correct term, because religion is a set of beliefs about the world of the spirits, but those who use it try to imply that they refer to something which is individualized and generic, as opposed to “organized religion” which has become a negative reference point since the 1960s.

Another component of apologetics today is the suggestion that religion is good for you, either psychologically or physically. There are hundreds of applied, “clinical”, publications proclaiming this message. There are a lot of questionable practices in the apologetics literature, including psychoanalytic articles dealing with personality dynamics of mythological figures (Beit-Hallahmi, 1995). But the height of apologetics absurdity is what is known as transpersonal psychology, where the reality of the spirits is a basic assumption. The problem here, and with many other kinds of apologetics is that
we are left to wonder which spirits should we talk about. Every religion tells us of hundreds or thousands or millions of spirits, and every religion claims that every other religion’s claims are false. I can understand the logic of a Christian transpersonal psychologist, who wants us to take seriously the spirits that her church believes in and to ignore all others, but I cannot understand a wholesale acceptance of trillions of spirits. What exactly are we supposed to do about them?

This kind of generic apologetics, where all beliefs are accepted, as long as they are “spiritual”, conveys an important message, because it is so divorced from the reality of religious belief and practice. Generic, ecumenical apologetics can only be a reflection of secularization, and the decline in the political power of religion and religions. Powerful religions are never ecumenical. When religionists of different hues collaborate, this is a symptom of some distress. While being far removed from historical forms of religiosity, the “spirituality” industry is a major part of the “New Age”, which serves to fill up the emptiness of spirit and to relieve the real suffering among the great masses of the desperate and alienated.

The psychology of religion, number 2 above, is concerned with a universal psychological readiness, which creates the universal plausibility of religious ideas. It does not deal with “faith” or “spirituality”, but the real substance of beliefs in spirits. The cognitive-evolutionary approach, introduced to us by Kirkpatrick, examines both “official” religious ideas, as well as ideas about Santa Claus or witchcraft, because psychologically, they are produced by the same processes (Boyer, 2001). Atran (2002) similarly makes no “…distinctions between magic and myth, between primitive and modern thought, or among animistic, pantheistic, and monotheistic forms of religion” (p. 8).

Lee Kirkpatrick, serious and honest in his search for a good theoretical framework, is leading us in the right direction. The search should have been ours, and not just his, and his work has led us to two historical turning points. The first was the decision to apply attachment theory to religiosity. The second is his current effort to commit us to making the cognitive-evolutionary approach the comprehensive framework for the coming psychology of religion. The first turning point was an attempt to make the psychology of religion into a psychology of love. I think this was a crucial move, because
religion is about love and submission. But having a broad theory of the world of spirits and ghosts was necessary to anchor us within the basic mechanisms of the human mind. The cognitive-evolutionary framework is much broader than that of attachment theory, and the author concludes (and hopes) that it will provide the psychology of religion with the theoretical arsenal it had been seeking for a long time. I can only concur with this conclusion and this hope.

An interesting historical point to ponder is how psychoanalytic ideas, this time through the agency of Bowlby’s attachment theory, continue to act as a major stimulus to the psychological study of religion (Beit-Hallahmi, 1989, 1996; Beit-Hallahmi & Argyle, 1997).

If we follow the plan proposed in this paper, we can now have a psychology of religion, which deals with the content of religious beliefs (and based on the panhuman, evolutionary, phylogenetic, mechanisms of mind), and a psychology of religiosity (“the social psychology of religion”, no. 3 above), which deals with the correlates of individual and group differences in the commitment to religious ideas. What Kirkpatrick has done for us is not just to create a bridge between old psychology of religion and the new evolutionary psychology of religion. Moreover, the most important idea that I learned from Kirkpatrick this time was how to reach an integration of the old and the new psychologies of religion. For this I am grateful, and we should all be.

References


ATTACHMENT, EVOLUTION AND THE PSYCHOLOGY OF RELIGION: A RESPONSE ON LEE KIRKPATRICK

Fraser Watts

ABSTRACT

Lee Kirkpatrick’s approach to the psychology of religion involves two main theoretical positions, attachment theory and evolutionary psychology. It is argued that the former is more fruitful than the latter because it stays closer to empirical data and suggests further hypotheses for investigation. An evolutionary approach to the psychology of religion suffers from the same problem as most evolutionary psychology of not being readily testable; also some common assumptions about the evolution of religion may be less compelling than is often supposed.

In his target article, and the book on which it is based (Kirkpatrick, 2005), Lee Kirkpatrick urges the desirability of a broad integrative theoretical framework for the psychology of religion. I fully agree that this is what we need. In recent decades we have been largely working on specific religious phenomenon, and have accumulated rich descriptions of them that are securely based on empirical data. The chapter headings of the ‘gold standard’ textbook of Spilka et al. (2003) indicate the things we now know about. After the first three general chapters there is a group of developmental chapters concerned with the form, content, role and function of religion in childhood adolescence and adulthood, and culminating in a chapter on religion and death. There are then chapters on specific aspects of religious life such as religious experience, mysticism, conversion and religious organisations; and a final set of chapters on the implications of religion for morality, helping behaviour and prejudice, coping and adjustment, and mental disorder. Some might want to add other topics to this already broad list, but these would be topics of the same kind as those covered by Spilka et al. It is noticeable that the early chapters of the book (including a welcome chapter on religion and biology) that deal with religion generally, are more programmatic and less empirical than the subsequent chapters.

Kirkpatrick’s point is that, despite the richness of what the psychology of religion has collectively achieved over last 30–40 years,
we are still lacking a broad psychological theory of religion. I agree. Some might say that Freudian theory once provided a broad, general theory of religion. However, it is an approach that now looks very simplistic, and sits uneasily with too much data for it to be convincing (though I believe that more recent work on object relations theory and religion is making a richer and more subtle contribution to the field, and will be more durable). So, the psychology of religion is still lacking a broad general theory that provides an integrative framework for the rich psychological accounts of specific religious phenomenon or that we have accumulated. In seeking such theories, Kirkpatrick turns to psychology more broadly, and proposes to apply to religion theories that already have broad applications in other areas of psychology. Again, I agree that is the right move to make. Another problem with the psychology of religion is that it is too self-contained. If we start to work with theories that are of interest to psychologists working on other phenomena, there is likely to be an improved cross-fertilization between the psychology of religion and other areas of psychology.

Kirkpatrick offers us two theoretical perspectives for the psychology of religion, evolutionary psychology and attachment theory. Far from being in competition with each other, they are interlinked; indeed one is nested within the other. Evolutionary psychology is the more over-arching theory, and attachment theory is nested within it, and Kirkpatrick explicitly says that attachment theory is only one of a series of theories that could be offered at that level. The fact that he has offered us two perspectives on theoretical approaches, and of rather different kinds, invites us to compare their relative utility, even though he would have us accept them both together rather than choose between them. I want to argue here that attachment theory looks a more useful kind of theory than evolutionary psychology for the psychology of religion. If I am right, it may have general implications for where we should put our theoretical effort in the psychology of religion in the coming years.

There is certainly an initial plausibility in the idea that the relationships religious people have to God are attachment relationships, analogous to those that occur in romantic and other human attachments. However, if the idea stopped there it would contribute little of value to the psychology of religion, and just be a rephrasing in psychological terminology of what has long been said by mystics and others. However, it is encouraging to see how attachment theory can
handle individual differences in religion. One of the key reasons why
general theories of religion have not always been fruitful is that they
too easily assume that all forms of religiousness are essentially the
same, whereas psychologists now know how different they can be
(e.g. Allport’s well-known distinction between intrinsic vs. extrinsic
religious people).

The distinction between secure and insecure religious attachment
styles seems set to become a really important distinction in the psy-
chology of religion. We will need good reliable ways of assessing
styles of religious and other attachments, but it is a variable that
deserves to be included in a great many empirical studies. The fact
that it has some similarity to William James’ well-known distinction
between once-born and twice-born forms of religiousness lends sup-
port to the idea that this is likely to be a distinction that will earn
its place in the psychology of religion. However, we can now approach
that distinction with greater theoretical precision than was possible
for William James, and with good hypotheses about its developmental
origin.

It is also encouraging to see attachment theory relating well to
empirical data on conversion, one of the longest-running topics in
the psychology of religion. It is very interesting, for example that
sudden conversions are predictable from insecure attachment pat-
terns. Indeed, one can see attachment theory serving as an integra-
tive framework for a much broader range of religious phenomena
than it has so far been used to address. For example, it seems likely
that religious attachments take different forms at different ages. Also,
people’s preferences among particular religious practices and ways
of approaching them (prayer, meditation, ritualistic worship, charis-
matic practices etc.) all seem likely to be a reflection of the basic
style of religious attachment. My hunch is that attachment theory
potentially provides a much broader framework for the psychology
of religion than Kirkpatrick has so far explored.

One of the interesting, and potentially controversial, aspects of
Kirkpatrick’s theory is the way he maintains both the ‘correspon-
dence’ and ‘compensation’ hypotheses, i.e. attachments to God can
correspond to the prevailing pattern of human attachments, or they
can compensate for deficiencies in those attachments. The objection
to this, as he is well aware, is that it renders attachment theory too
easily able to handle whatever data turns up and calls its falsifiability
into question. However, I fully share Kirkpatrick’s view that both
hypotheses are required, i.e., that correspondence and compensation processes are both at work in determining the pattern of religious attachments. If that is the case, the best we can hope for is increasing precision and sophistication about the kinds of people and circumstances under which one process will predominate over the other.

Kirkpatrick provides a very interesting example of the correspondence hypothesis when he considers the link, found in the Christian right, between religion and ‘family values’. It is a link that is puzzling from many points of view, not least because only a highly biased reading of the Christian New Testament could construe it as providing support for family values. (Jesus is against divorce but, otherwise, neither Jesus nor St Paul give much support to marriage or family.) Kirkpatrick’s interesting hypothesis is that it will be those who have secure attachment styles, which incidentally are also good for reproduction, that will be most drawn to family values, and to forms of religion that embody family values. That leads to the clear empirical prediction that there should be a correlation between secure attachment styles and family-values religion, an example of the correspondence hypothesis.

However, it seems to me equally plausible to set up an alternative hypothesis, based on the compensation principle. Perhaps those who are most insistent about family values are those who are most anxious about the breakdown of secure attachments, and fear that that will lead to a destabilisation of society generally. There is much in the rhetoric of the Christian right that is consistent with that view. The hostility to homosexuality that is another prominent feature of family-values religion could also be construed as arising from a defensive insecurity about attachments. So, strident family-values religion could be seen as compensation for insecurity about attachments, rather than as reflecting secure attachments. The attraction of this, whichever view turns out to be correct, is that it is a point at which the application of attachment theory to religion provides competing hypotheses which, in principle, are empirically testable.

Though I am enthusiastic about approaching religion from the perspective of the attachment theory, I am less hopeful about what an evolutionary perspective will do for the psychology of religion. It is not that I object to thinking about religion in evolutionary terms; I take it for granted that religion has an evolutionary origin. However, the central problem is that evolutionary psychology has so far had great difficulty in connecting adequately with data. It is not difficult
to come up with plausible evolutionary explanations of higher aspects of human functioning such as morality and religion. The problem is to secure an adequate to-and-fro between theory and data for us to have confidence in any particular evolutionary explanation of religion.

One of the big debates is between those who assume that religion has evolved because it has survival value, and those who assume that it is derived from other things that have survival value. Kirkpatrick assumes the latter, and I am on record (Watts, 2002, pp. 25–26) as taking the same view. So, incidentally, does Robert Hinde (1999) in what I regard as one of the best evolutionary books on religion, Why Gods Persist, a book that is a curious omission from the Kirkpatrick’s bibliography. (One of the merits of Hinde’s approach is that he does as good a job as is possible of linking evolutionary and empirical approaches to religion.) For those who agree with Kirkpatrick, Hinde and myself about this, there is no need to look for what survival value religion may have had, in the way that sociobiologists like E. O. Wilson are inclined to do. However, what is really disconcerting is that it is hard to see how to settle empirically the debate about whether religion evolved because it has survival value, or was derived from other things that had survival value.

Kirkpatrick places the link between family values, reproduction and secure attachments in an evolutionary context. However, it is not clear what there is to be gained by doing so, nor that it leads to any fresh empirical predictions. It is surely significant that the interesting predictions that Kirkpatrick makes here are focused primarily on attachment theory. The evolutionary perspective provides a broader context that may enhance the plausibility of his predictions, but if doesn’t lead to any additional engagement between theory and data.

Kirkpatrick, like many other recent theorists assumes that there is an evolutionary development of cognitive functioning in which cognitive capacities that evolved in one domain are subsequently applied to other domains. From this point of view, religion looks like a (mis)application to the inanimate world of a mode of thinking that was developed for animate objects. It is parallel to the assumed process by which concepts that began with literal applications are extended, by metaphor and analogy, to other domains. To many, this is a plausible assumption. It is certainly the current orthodoxy in evolutionary psychology, and Kirkpatrick cites lines of recent empirical research that are consistent with it. However, this orthodoxy
It is perhaps worth drawing attention to how highly speculative this current orthodoxy about the evolution of mind is. As far back as we can go, language seems to be metaphorical. However, very strangely, we are still inclined to make the assumption that language was originally non-metaphorical. In a similar way, when human thought seems to be increasingly animistic the further back we go, it seems arbitrary to assume a pre-animistic phase of human thought, of which we have no direct evidence. The alternative hypothesis would be that human thought began by being metaphorical and animistic, and only later distilled out into more literal and domain-specific modes (see Watts, 2002, pp. 151–157). If so, religious thought may be characteristic of such evolutionary primitive thought. My concern here is not so much to argue this unorthodox view, as to draw attention to how arbitrary, and quite possibly wrong, is the current orthodoxy of evolutionary psychology.

My own strategic preference would be to apply to religion a general model of the cognitive architecture that has arisen from empirical research in other areas of psychology, and my own efforts in this area have focused on the Interacting Cognitive Sub-systems model of Teasdale and Barnard (e.g. Watts, 2002, pp. 85–88; there is more work on this in progress). In many ways it is an approach that is in tune with Kirkpatrick’s approach in that it is looking to general psychology for broad integrative theories that can hold the psychology of religion together. However, I believe that it is better to start with empirically-based theories of cognitive functioning rather than with the cognitive speculations of evolutionary psychology.

I share Kirkpatrick’s assumption that evolution has the potential to bring coherence to the psychology of religion, integrating things that might otherwise remain disparate. In some ways, that seems attractive. However, if the coherence is bought at the price of adopting a rather arbitrary set of psychological assumptions that have only a weak empirical basis, it may prove to be more hindrance than help. It would lead us to a psychology of religion that, as Kirkpatrick puts it, was very much psychology first and of religion only second. The danger with such an approach is that it might distract us from actually understanding religion from a psychological point of view.

Kirkpatrick is commendably cautious about one key point, which he calls the veridicality trap, i.e. ‘the common but patently false
assumption that if a belief can be understood scientifically—e.g. in terms of psychological processes—then the beliefs are themselves false’. It is a welcome development (despite my caveats above) that neurological and evolutionary perspectives are becoming increasingly prominent in the psychology of religion. Unfortunately, the ‘nothing but’ move, assuming that religion is entirely explicable in biological terms and therefore cannot be true, is too tempting for many to resist. I very much welcome the fact that Kirkpatrick is too clear-headed to fall for this trap.

In conclusion, I unreservedly welcome the contribution of attachment theory to the psychology of religion, and see it as one of the more fruitful theoretical perspectives to have been introduced recently. It is the right kind of theory. Kirkpatrick sees it as an example of the one of a set of possible theories, and again I agree and would welcome more such theories, when we can find them. I also welcome evolutionary thinking about religion as one element in the psychology of religion. However, given the highly speculative and unempirical nature of so much evolutionary psychology, I am reluctant to accord it the dominant and co-ordinating role in the psychology of religion that Kirkpatrick wants to give it.

References

REJOINDER: RESPONSE TO BEIT-HALLAHMI AND WATTS

Lee A. Kirkpatrick

ABSTRACT

Both Watts (this issue) and Beit-Hallahmi (this issue) are enthusiastic about attachment theory as an important contribution to the psychology of religion, but they raise very different criticisms regarding other aspects of the book. I respond to Beit-Hallahmi by defending my assertion that a scientific approach to psychology of religion need not lead to the conclusion, nor rest on the premise, that the beliefs under study are ontologically false. I argue further that this “veridicality trap” has deep roots in prevailing, deeply mistaken assumptions about how the mind/brain works, and show how an evolutionary approach clearly exposes such reasoning as fallacious and offers a powerful, alternative perspective on the problem. In response to Watts, I defend evolutionary psychology against the charge that it is not sufficiently empirical, and argue that the computational cognitive approach he prefers should be seen as complementary to an evolutionary approach rather than an alternative to it.

Rejoinder

Watts (this issue) and Beit-Hallahmi (this issue) offer sharply different perspectives in their thoughtful commentaries on my book. I am certainly pleased by many aspects of their critiques, and particularly the fact that both seem enthusiastic about the application of attachment theory to the psychology of religion. As the commentaries diverge sharply beyond this point, I will respond to them in two separate sections below.

Response to Beit-Hallahmi

Deep in my book’s last chapter I made the point, more or less in passing, that scientific questions about the origins (biological, psychological, sociological) and nature of religion are logically independent of questions about the truth or falsity of religion. It did not occur to me that this assertion was particularly noteworthy, much less controversial: I raised it simply to make the point that an evolutionary approach
is no different from other scientific approaches to religion in this regard. Nevertheless, Watts went out of his way to commend me, and Beit-Hallahmi to criticize me, on the assertion. Although the issue is not central to the book (thus its late appearance in Chapter 13), it is such a divisive and important issue for the psychology of religion generally that it warrants attention.

I am certainly no apologist for religion, but I stand firmly by my assertion. To conclude that a belief is false because its origin (genesis) can be found in genes, or a particular location or process in the brain, or socialization by parents, is precisely to make “the logical error of accepting or rejecting a proposition because of its source”—i.e., to commit the genetic fallacy. Developmental psychologists study the processes by which young children come to understand that unsupported objects fall to the ground, or that $2 + 2 = 4$, but this doesn’t make either of these facts untrue. Researchers have conducted a massive amount of research to explain how the visual system works, but this doesn’t make our perception any less accurate. Every belief and behavior can in principle be traced ultimately to influences of genes, brains, and environments, but surely this doesn’t mean that all beliefs are therefore necessarily false.

Beit-Hallahmi’s primary concern, however, seems to be with a slightly different variant of this argument, according to which the ontological falsity of religion is not the conclusion drawn from a scientific explanation of religion but rather a necessary premise: He maintains that “if we did accept religion as a veridical representation of reality, there would be no need and no reason for psychological explanations”. I will leave it to the philosophers to determine whether this technically is another example of the genetic fallacy, or whether we need a different label for it, but in either case it surely is every bit as fallacious. We need not assume that $2 + 2$ equals something other than 4 in order to embark on scientific research to understand how people come to learn this. We certainly wouldn’t want to suggest that vision researchers should be interested only in optical illusions. If vision need not be “false” to be worthy of study, then why does religion?

Be that as it may, there is a deeper and more important issue here. We do in fact usually find errors more interesting than correct judgments. Optical illusions are more fun than the technical details of rods and cones, and it is amusing to see people persist in the
belief that they are “due” for a win at the gambling table after a series of losses. Why? I submit it is because of an underlying, implicit assumption that mind/brains ought generally to be correct. Errors are thus interesting because they are unexpected and counterintuitive.

This kind of thinking, however implicit, exposes a huge conceptual hole in the extant Standard Social Science Model that evolutionary psychology aspires to replace. Consider again the visual system, which enables us to sense light (within a certain range of wavelengths) reflected off objects in the environment on a two-dimensional retinal surface, and eventually transform it into identifiable three-dimensional conceptual images of discrete objects—and do so despite constantly changing lighting conditions, distances, and movement. We can almost instantly pick a friend’s face out of an array containing 100 strangers’ faces, although to most living organisms human faces almost certainly all look the same. These facts are truly astonishing, and what should amaze us is that we are capable of seeing at all. Viewed this way, the fact that clever researchers are able to construct artificial stimuli in the laboratory to “fool” the system seems almost trivial. The question of why we occasionally get fooled by optical illusions is far less interesting than the question of why we aren’t fooled all the time.

We should be equally astounded by the fact that we (often) are capable of thinking and reasoning correctly—i.e., consistent with abstract rules of symbolic logic. There is an infinite number of ways to reason erroneously (or not reason at all); being wrong is easy. The implicit assumption of the SSSM seems to be that the rules of symbolic logic, along with a few other general principles of learning, can be taken for granted: Such abilities are just in there, and by default people are expected to apply them correctly. But this is like saying that vision is simple because all you have to do is open your eyes and voila!, there’s the world. This is magical thinking, and it is deeply flawed.

An evolutionary perspective turns this problem on its head, forcing us to think instead about how brain/minds are able to do inferential reasoning at all. The default in nature is stupidity, as exemplified nicely by such things as bacteria. Assuming that the basic psychological architecture with which humans come equipped is the product of eons of evolution, we must ask how natural selection could (and how it could not) have fashioned cognitive systems capable of solving problems of vision, inference, and so forth. In light of
a proper understanding of natural selection, it is highly implausible that the brain/mind could contain anything like general, all-purpose inferential mechanisms encoding the abstract rules of symbolic logic. The ability to solve abstract symbolic logic problems would not have conferred reproductive advantages among our distant ancestors. Research by Cosmides and Tooby (1992) illustrates one way in which an evolutionary approach can be brought to bear on such problems, in which a more specialized, domain-specific mechanism designed for a particular application of logic is likely to have evolved—in this case, a mechanism for detecting violations of social contracts—and the ability to solve certain kinds of logic problems depends on the degree to which a problem context cues this domain-specific mechanism. We don’t possess a general logic mechanism which we then apply to particular contexts, but rather a context-dependent mechanism that can, under the right circumstances, be applied more generally.

Another way to see the problem is to consider other species, for which we generally have no difficulty adopting an evolutionary perspective. The field of ethology exploded onto the scene in the middle of the 20th century and provided a way of conceptualizing animal behavior in terms of specialized systems and mechanisms whose origins and design could be explained in terms of adaptive function. It was precisely this way of thinking that led to Bowlby’s (1969) development of attachment theory. Neither humans nor other animals possess a general, all-purpose “social interaction” system; instead, we possess functionally specialized systems that underlie attachment relationships, coalitions and friendships, mating relationships, and so forth—each characterized by its own distinct evolutionary logic. Goslings do not reason that it would be a good idea to stay close to their mothers; they possess an imprinting system that motivates them to follow the first large, moving object that they see, thus enabling Konrad Lorenz (1935) famously to fool the system and induce hatchlings to follow him around rather than their mother.

This evolutionary perspective on cognition and behavior leads us to see the issue of accuracy versus “errors” in an entirely new light. If natural selection was the “designer” of a species’ psychological architecture, then we should expect these systems to perform in ways that were adaptive—in the strict sense of enhancing reproductive success or inclusive fitness—in the environments in which they evolved. Importantly, “adaptive” does not always mean “correct” or “accurate.”
Rabbit predator-detection systems are designed in such a way that they make many, many errors mistaking harmless movements and sounds for predators. Ancestral rabbits whose predator-detection system were designed to be “accurate,” in the sense of minimizing errors, did not become rabbit ancestors, because just one incidence of mistaking a predator for a harmless wind-blown leaf brought an abrupt end to their reproductive lives. Given the impossibility of an error-free system, natural selection has fashioned one that effectively avoids one kind of (very costly) error, despite the fact that this leads to large numbers of (less costly) errors.

Returning to the issue of the genetic fallacy and Beit-Hallahmi’s critique, it is for these reasons that I argued in the book that an evolutionary approach might be particularly useful in avoiding what I dubbed the “veridicality trap” in the psychology of religion. If we assume, per the SSSM, that humans should in general reason correctly about things, then I suppose it might indeed follow that false ideas are worthy of study and correct ones require no explanation. Once we cut through this magical thinking we can see that true beliefs, every bit as much as false beliefs, require scientific explanations. Religious beliefs can thus be equally worthy of scientific study whether they are “correct” or not—or whether we simply confess that we don’t know if they are correct or not. An evolutionary perspective does not change this, and if anything makes the point even more clearly by providing a clear alternative: We should expect mind/brains to be designed according to a criterion of reproductive success or inclusive fitness, not veridicality.

Response to Watts

Although Watts, like Beit-Hallahmi, supports my argument regarding the need for a broad, integrative theory within which attachment and other theories of religion would fit together, and he seems enthusiastic about attachment theory in the psychology of religion, he is reluctant to accept evolutionary psychology as the answer. Having successfully convinced him about the first half of my case, I’ll take another shot here at the other.

First, there is something inconsistent about accepting attachment theory but not evolutionary psychology. To do so is to severely underestimate just how important the evolutionary perspective is to attachment theory. Bowlby’s evolutionary and ethological arguments are
precisely what sets attachment theory apart from previous psychoanalytic theories: He not only laid out a clear model for the organization of one particular part of the brain/mind, but made a persuasive case as to why the brain/mind is designed this way rather than some other way. Moreover, an evolutionary perspective is useful in eliminating a variety of alternative psychoanalytic ideas from serious contention. The notion that boys are motivated by a desire to have sex with their mothers is absurd; there is ample evidence that, conversely, all humans (like members of many other species) are innately predisposed to experience disgust at the thought of mating with close genetic kin. The idea of a “death instinct” is about as contrary to natural selection principles as one could find. Freud’s (1946) fanciful Totem-and-Taboo story about memories of the ancestral killing of the father being carried forward into subsequent generations cannot possibly be true given our understanding of natural selection. (Freud bought into a now-discredited Lamarckian view of evolution involving the genetic transmission of acquired traits.) Bowlby’s is the only theory to emerge from the psychoanalytic tradition that fits squarely with modern evolutionary psychology and biology.

Second, Watts suggests that a preferable alternative (to evolutionary psychology) for a higher-order organizational framework for psychology of religion is provided by computational theories of cognition. This computational approach is entirely consistent with evolutionary psychology, and the decision is not an either-or one. Indeed, one of the key differences between contemporary evolutionary psychology and its predecessor, sociobiology, is that it is highly cognitive. Whereas sociobiologists tended to focus on adaptationist explanations of behavior, evolutionary psychologists acknowledge the crucial distinction between behavior and the psychological systems that give rise to it. Genes do not produce behavior directly; they guide the construction of computational mind/brain mechanisms that, in turn, give rise to behavior in interaction with the environment. A central goal of contemporary evolutionary psychology is to not only identify the species-specific psychological adaptations that make up the human mind/brain, but also to provide detailed accounts about the design features of this psychological architecture. Pinker’s (1997) How the Mind Works provides an excellent account of how computational theories of cognition fit hand-in-glove with evolutionary psychology: The computational theories provide models of how the mind/brain does what it does,
whereas the evolutionary approach explains, and provides hypotheses about, why it is designed to do those things and not others. (It is worth noting here that I would make the same argument with respect to the role of neuroscience, which also should not be viewed as an alternative to evolutionary psychology but rather as a different level of analysis that, in principle, should interface neatly with evolutionary psychology. Neuroscience answers a different set of questions about how cognitive mechanisms are physically instantiated in the brain—the hardware on which the software runs, so to speak.)

Watts’ biggest concern, however, seems to be that evolutionary psychology is not sufficiently empirical. This perception is unfortunately widespread among social scientists. It is not entirely clear to me why Watts believes this—it isn’t true—but I will address here some of the reasons why I think he and others might.

First, I fear that one might get this impression from my own presentation in this particular book, in which my extended discussion of attachment theory includes a much more detailed review of data than the much briefer subsequent sections regarding other evolved mechanisms. I could, at least in principle, have provided an equally detailed and data-based treatment of these other mechanisms. Attachment received more detailed treatment only because it has been the focus of much of my own work.

Second, the contemporary evolutionary-psychology approach, as distinguished from sociobiology, is extremely young. Many modern criticisms of evolutionary psychology, including the common misconception that it is merely a collection of post-hoc stories that are not empirically testable, fail to acknowledge how different the modern approach is from its predecessor. Evolutionary psychologists around the world are diligently carrying out empirical studies, using all of the available laboratory tools from psychological sciences (in addition to data from anthropology, artificial intelligence, experimental economics, and many other fields) to subject their hypotheses to empirical test. In the laboratory, evolutionary psychology looks just like any other empirical psychology; the difference lies only in the theoretical sources of hypotheses to be tested.

Third, some questions—whether derived from an evolutionary perspective or not—are more difficult to test empirically than others, and Watts has chosen to focus on some of the most difficult. Questions about the origins and evolution of language, as it occurred hundreds
of thousands of years ago, are among the stickiest wickets around. It surely will be difficult to determine empirically whether language was “metaphorical” from the start or became so later on, and whether religion emerged originally as an adaptation or as the byproduct of other mechanisms with different functions. I think the numerous arguments provided by Tooby and Cosmides (1992) and Pinker (1997), among others, are compelling as to why functional domain-specificity must in principle have come first, and I recommend these sources to readers interested in those general questions. As for religion itself, I have tried to make the case in two ways: by outlining specific reasons why the religion-as-adaptation hypothesis is problematic, and by presenting a broad view of a plausible religion-as-byproduct approach that draws upon a wide range of theories and data sources. In any event, it is not clear what reasonable alternative exists for addressing these kinds of difficult questions. There certainly is nothing in general computational cognitive theories that will help us answer these kinds of questions.

Fortunately, such questions need not be answered definitively in order for us to adopt and benefit from an evolutionary approach to religion. The evolutionary approach is not a monolithic enterprise, and there is no single evolutionary psychology. What is “orthodoxy” to some is not to others. I, along with Atran and others, will continue to argue against adaptationist explanations and in favor of byproduct explanations of religion, while others will continue to pose new adaptationist theories. We can all continue to design empirical studies derived from our respective approaches, and in the end we will see how they fare. I could not agree more with Watts when he emphasizes that empirical data will be the final arbiter. My book lays out the position on which I am placing my bet.

References

INTOLERANCE OF AMBIGUITY WITHIN A RELIGIOUS
IDEOLOGICAL SURROUND: CHRISTIAN TRANSLATIONS
AND RELATIONSHIPS WITH RELIGIOUS ORIENTATION,
NEED FOR COGNITION, AND UNCERTAINTY RESPONSE

P. J. Watson and Ronald J. Morris*

ABSTRACT

This study assessed the possibility that the Budner (1962) Intolerance
of Ambiguity Scale can offer an ideologically biased understanding of
religious commitments. In a large sample of university undergraduates
(N = 650), Budner Scale correlations with Religious Interest, Religious
Orientation, Need for Cognition, and Response Uncertainty supported
the conclusion that religion predicts an inability to cope with uncertainty.
At the same time, however, special procedures were used to create new
scales expressing a Christian Tolerance of Ambiguity by translating
Budner Scale items into a language that was more compatible with
religious beliefs. These Christian Tolerance of Ambiguity measures
revealed that religiousness was associated with an ability rather than
an inability to cope with uncertainty. Conflicting results between these
Christian and nonreligious Tolerance of Ambiguity measures yielded
additional support for the Ideological Surround Model of the psychology
of religion.

In the vast majority of their investigations, psychologists of religion
combine standardized empirical observations, quantitative expression
of variables, and formal statistical analyses to pursue a scientifically
rigorous study of religious commitments. At least implicitly, these
researchers often seem to assume that the scientific rigor of such
procedures guarantees the “objectivity” of their work. Confirmation
of that assumption may seem self-evident in the overall productivity
of this quantitative measurement paradigm (e.g., Spilka, Hood,
Hunsberger, & Gorsuch, 2003).

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of Ambiguity Scale, and their assistance is gratefully acknowledged.
The “objectivity” of such studies, nevertheless, can be challenged. According to the Ideological Surround Model of the relationship between psychology and religion (Watson, 1993, 1994), all efforts of psychologists to study religion (or of religious individuals to evaluate psychology) are necessarily framed within the somewhat non-empirical, normative, and sociological dimensions of ideology (MacIntyre, 1978, pp. 5–6). In other words, empirical findings in this literature are invariably based upon norms about what is and is not acceptable in the analysis of religion. A personal commitment to those norms makes a psychologist the member of a sociologically specific community of scholars. Since both religion and science are based upon somewhat non-empirical assumptions, the scientific analysis of religion produced by this community can never find ultimate empirical foundations in the commitment to empiricism that largely defines science itself. Studies in the psychology of religion, consequently, can never be wholly “objective.”

Many psychologists of religion, for example, work within a naturalistic ideological surround. Support for naturalism is evident in innumerable “objective,” empirical observations. Yet, definitive proof of naturalism itself appears to be beyond the scope of current scientific methodologies. Causes of the “big bang” at the supposed origins of the universe, for instance, cannot now be identified, and Darwinian explanations of speciation make reference to processes that remain to be confirmed (e.g., Finger, 1997; Murphy & Ellis, 1996; Pearcey, 2004). Observations related to naturalism, therefore, rest upon basic beliefs about the universe that cannot be anchored empirically, thus making the position only somewhat empirical.

Within this naturalistic system of “good” and “evil,” the somewhat non-empirical assumptions of researchers will have unavoidable normative implications. This is so because thought forms inconsistent with reductive materialism will tend to be evaluated as “evil.” Theistic explanations of the origins of the universe and of the diversity of life within it obviously violate naturalistic norms, and would thus be unacceptable. Again, even implicit commitment to this naturalistic value system would unite a researcher with a large community of like-minded scholars. Those scholars would cooperate as researchers and peer-reviewers to produce a body of knowledge that positions religion within a naturalistic ideological surround. That naturalistic frame of reference might or might not offer an adequate representation of religious commitments.
To say that a particular approach to the psychology of religion is ideological in no way implies that it should be rejected. All research into religion will unavoidably rest upon ideological assumptions. The scientific rigor of empirical methods also has advantages that need not be dismissed, even if evidence based upon such procedures can never be wholly “objective.” The psychology of religion, therefore, seems to require at least some approaches that can combine the rigor of empirical methods with a sensitivity to the possible influences of ideology.

At its broadest level, the Ideological Surround Model suggests that a more defensible kind of “objectivity” might be approached through empirical methods that maintain an awareness of the perspectival nature of all empirical methods (e.g., Nietzsche, 1887/1967, p. 119; Watson, 2004). A completely “unbiased objectivity” might be impossible, but a more “balanced objectivity” could be achieved. The task would be to develop a more hermeneutical empiricism in which standard social scientific procedures were used to examine religious commitments within different ideologically specific, interpretative frames of reference. As only the most obvious possibility, greater balance in the psychology of religion might be accomplished by simultaneously examining issues within social scientific and religious ideological surrounds. An array of more hermeneutical empirical methods has in fact been developed for this purpose.

Within the essentially Stoic ideological surround of Rational-Emotive Therapy, for example, religion has been linked conceptually with irrational beliefs that supposedly promote emotional disturbance (Ellis, 1980). Religious commitments do in fact predict higher levels of what Rational-Emotive therapists frequently identify as pathogenic irrationalities (Watson, Folbrecht, Morris, & Hood, 1990; Watson, Morris, Hood, & Folbrecht, 1990). Empirical procedures, nevertheless, can let research participants indicate how Rational-Emotive irrationalities might be reinterpreted within their own systems of religious rationality. Scales based upon a therapeutic ideological surround can then be rescored to express a religious irrationality. A comparative analysis of these two practical rationalities can then be accomplished by correlating the alternative scorings of the very same instruments with measures of mental health. In many instances, the religious system of rationality proves to be more valid than does that associated with Rational-Emotive Therapy (Watson, Morris, & Hood, 1988, 1993, 1994; Watson, Milliron, Morris, & Hood, 1994).
This and other hermeneutical empirical methods have been devised to explore the ideological dimensions of numerous other issues in the psychology of religion. Specifically, such methods have clarified possible ideological concerns in the use of psychological scales measuring Religious Orientation (Watson, Morris, Hood, Milliron, & Stutz, 1998), Self-Esteem (Watson, Morris, & Hood, 1987), Existential Confrontation (Watson, Hood, & Morris, 1988), Social Desirability (Watson, Morris, Foster, & Hood, 1986), Self-Actualization (Watson, Morris, & Hood, 1989), and Religious Fundamentalism along with Right-Wing Authoritarianism (Watson, Sawyers, Morris, Carpenter, Jimenez, Jonas, & Robinson, 2003). Most broadly, these studies have suggested that a more balanced understanding of the psychology of religion can indeed be accomplished if the empirical methods of the quantitative measurement paradigm are used to assess the hermeneutical dimensions of empirical methods.

Present Study

In the present investigation, hermeneutical empirical methods assessed the possibility that the Budner (1962) Intolerance of Ambiguity Scale could offer an “objectively” unbalanced positioning of religious commitments within a nonreligious ideological surround. The Budner scale theoretically records an inability to cope with uncertainty. Positive correlations with measures of religiousness (e.g., Genia, 1997), therefore, may confirm suspicions that traditional religious faith promotes cognitive rigidity and a lack of complexity in thinking about existential concerns (e.g., Batson, Schoenrade, & Ventis, 1993).

Alternatively, the Budner Scale might conceptualize tolerance and intolerance of ambiguity in a language that is ideologically incompatible with or insensitive to a religious frame of reference (Watson et al., 2003, p. 326). “Empirical translation schemes” can be used to test his possibility (Watson, Milliron, Morris, & Hood, 1995; Watson et al., 2003). This specific procedure involves an attempt to translate each item from a psychological scale into a language that is more ideologically compatible with religious commitments. Correlations between each original item and its potential translation reveal a range of religious interpretative possibilities that might be connected with a psychological construct.

In this study, graduate students in a Christian psychological counseling program translated each Budner Scale item into a statement
expressing a Christian Tolerance of Ambiguity. The original scale and two potential translations for each statement then were administered to a large sample of undergraduates enrolled in a nonreligious, state university. Translations correlating negatively with the corresponding Budner items appeared to articulate a Christian ability to cope with uncertainty. Items that correlated non-significantly or positively with corresponding Budner statements pointed toward beliefs that seemed consistent with a Christian but not with a nonreligious interpretation of what a tolerance of ambiguity might mean. These negative, non-significant, and positive items then were used to create three measures that expressed a range of Christian interpretive possibilities for understanding tolerance of ambiguity. Correlations with a number of other measures clarified the meaning of those interpretative possibilities.

Religious meanings of the three interpretative possibilities were explored by examining their correlations with a ten-point scale in which research participants rated their degree of interest in religion. The Allport and Ross (1967) Religious Orientation Scales were administered as well. The Intrinsic Religious Orientation Scale was designed to operationalize a sincere form of belief in which individuals actively try to live their religion. The Extrinsic Scale instead records a sometimes-selfish motivation to use religion as a means to other ends. Much, though not all research, has supported the assumption that the Intrinsic and Extrinsic Scales measure largely adaptive and maladaptive motivations, respectively (Donahue, 1985). A previous finding that the Intrinsic Scale correlated positively with the Intolerance of Ambiguity Scale, therefore, suggested that the Budner Scale might offer an ideologically unbalanced measure of the Intolerance of Ambiguity construct (Watson et al., 2003).

Psychological meanings of these three interpretative possibilities were explored through use of the Need for Cognition and the Uncertainty Response Scales. High Need for Cognition points toward individuals who have “active, exploring minds and through their senses and intellect, reach and draw out information from their environment” (Cacioppo, Petty, Feinstein, & Jarvis, 1996, p. 199). A Need for Cognition is obvious, for example, in self-reports that “the notion of thinking abstractly is appealing to me” and that “I would prefer complex to simple problems.”

The Uncertainty Response Scale measures constructs of relevance to an inability to cope with uncertainty and was created to address
psychometric inadequacies associated with the Budner and other similar scales (Greco & Roger, 2001). Illustrative of the Emotional Uncertainty Subscale are statements that “I feel anxious when things are changing” and “I get worried when a situation is uncertain.” Cognitive Uncertainty is made obvious in such claims as “I like to plan ahead in detail rather than leaving things to chance” and “I like to have my life and career clearly mapped out.” A Desire for Change Subscale is made apparent in such assertions as “I find the prospect of change exciting and stimulating” and “I think variety is the spice of life.” Emotional and Cognitive Uncertainty correlate positively with each other and negatively with Desire for Change.

Greco and Roger (2001, p. 524) found that Emotional and Cognitive Uncertainty also correlated positively with what was essentially a measure of Intolerance of Ambiguity, whereas Desire for Change was unrelated to this construct. Only Emotional Uncertainty predicted maladjustment, however. This subscale was associated with lower Self-Esteem and with higher Neuroticism, Ruminatin, Trait Anxiety, and physiological responsiveness to anxiety-inducing stimuli. Cognitive Uncertainty, in contrast, was linked to greater Self-Esteem and reduced Neuroticism. Desire for Change was associated with several sensation-seeking dimensions of Extraversion.

In summary, research participants in this study responded to the Budner Scale and to three versions of how that measure might be reinterpreted in terms of a Christian Tolerance of Ambiguity. Negative, Nonsignificant, and Positive Christian Tolerance of Ambiguity Scales were defined through correlations of the potential Christian translations with their corresponding Budner items. The hypothesis was that direct Budner Scale relationships with religious commitments could offer an “objectively unbalanced” representation of religious individuals within a nonreligious ideological surround. Strongest empirical support for that hypothesis would appear if Christian Tolerance of Ambiguity items correlated negatively with the Budner Scale while also predicting more adjusted forms of religious and psychological functioning. Data for the Negative Scale were, therefore, most noteworthy. Specifically, a potential ideological misrepresentation of religion would be most obvious if the Negative Scale correlated inversely with the Budner, Extrinsic, and Emotional Uncertainty Scales and directly with the Intrinsic, Religious Interest, Need for Cognition, Desire for Change, and Cognitive Uncertainty measures.
Method

Participants

Participants were students enrolled in Introductory Psychology classes. All received extra course credit for their voluntary contributions to this project. With an average age of 19.8 years ($SD = 3.8$), the sample consisted of 265 males, 379 females, and 6 individuals who failed to indicate their gender. Religious affiliation was 39.4% Baptist, 11.8% Methodist, 8.8% Catholic, 6.3% Presbyterian, 5.4% Church of Christ, 2.6% Church of God, 6.3% “Other Protestant,” 6.5% atheist or agnostic, and 12.9% simply “Other.” These students were 69.4% Caucasian, 23.7% African-American, 2.9% Oriental/Asian, and 4.0% various other racial groups.

Measures

All psychological scales were presented in a single questionnaire booklet. A cover page obtained relevant background information, including Religious Interest Ratings. To assess this rating, participants were asked, “How interested are you in religion?” Responses ranged from “not at all interested” (0) to “extremely interested” (9).

The 16 items of the Budner (1962) Intolerance of Ambiguity Scale appeared in the first section of the questionnaire and were followed by the Uncertainty Response measure which contained the 15, 16, and 17 statements of the Emotional Uncertainty, Desire for Change, and Cognitive Uncertainty subscales, respectively (Greco & Roger, 2001). Next came the 18-item version of the Need for Cognition Scale (Cacioppo et al., 1996) and then the 9 Intrinsic and the 11 Extrinsic items of the Religious Orientation Scales (Allport & Ross, 1967). The 32 Christian Tolerance of Ambiguity translations were presented at the very end of the booklet.

Responses to all but the Allport and Ross instruments occurred along a 0 to 4 Likert scale. With the Need for Cognition measure, reactions to each statement ranged from “strongly uncharacteristic of me” to “strongly characteristic of me.” All other Likert scales utilized a “strongly disagree” to a “strongly agree” response format. Scoring of the Allport and Ross instrument involved use of the 1 to 5 scale associated with standardized procedures (Robinson & Shaver, 1973).
Procedure

In preparation for this study, six graduate students enrolled in a Christian psychological counseling program analyzed the Budner Scale in order to develop Christian versions of each of the 16 statements associated with this instrument. Conceptualization and discussion of the possibilities was made easier by attempting to create measures of a Christian Tolerance rather than Intolerance of Ambiguity. Each student independently generated several potential translations for each Budner statement. Reverse as well as positively scored statements of a Christian Tolerance of Ambiguity were devised. Group discussion of the potential translations identified two statements per each Budner item that best expressed how a tolerance of ambiguity might be understood within a Christian ideological surround.

Questionnaire booklets were administered in large group settings. Participants entered responses to all items on standardized answer sheets, which subsequently were read into a computer data file by optical scanning equipment. The first step in analyzing these data involved an examination of correlations between each Budner item and the two potential Christian translations. As noted previously, Christian translations were combined into Negative, Nonsignificant, and Positive Christian Tolerance of Ambiguity Scales based upon these correlations. Statements displaying a negative item-to-total correlation with the full scale were eliminated in order to maximize the internal consistencies of these three new measures. Scores for all instruments were expressed as average responses per item. Correlations among measures were at the focus of the data analysis procedures.

Results

With one exception, internal reliabilities for all scales were acceptable for research purposes (see Table 1). The Intolerance of Ambiguity measure was the one exception, and its relatively low coefficient alpha confirmed previous concerns about the psychometric adequacy of these instruments (Greco & Roger, 2001). At the same time, however, a focus on Budner Scale data alone suggested strong support for a nonreligious ideological positioning of religious commitments in terms of cognitive rigidity and an inability to cope with uncertainty. As Table 1 demonstrates, this was true because the Intolerance of Ambiguity Scale correlated positively with all three measures of
<table>
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<th>Variables</th>
<th>α</th>
<th>M</th>
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<th>1.</th>
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<th>6.</th>
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<td>1. Intolerance of Ambiguity</td>
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<td>1.77</td>
<td>0.42</td>
<td></td>
<td></td>
<td>.28***</td>
<td>.09*</td>
<td>.24***</td>
<td>-.41***</td>
<td>.25***</td>
<td>-.48***</td>
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<td>2. Intrinsic Religion</td>
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<td>3.37</td>
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<td></td>
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<td>-.22***</td>
<td>.74***</td>
<td>.01</td>
<td>-.01</td>
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<td>2.60</td>
<td>0.65</td>
<td></td>
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<td>-.15***</td>
<td>-.15***</td>
<td>.17***</td>
<td>.03</td>
<td>-.03</td>
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<td>4. Religious Interest</td>
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<td>2.27</td>
<td></td>
<td></td>
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<td></td>
<td>.01</td>
<td>.01</td>
<td>.00</td>
<td>-.23***</td>
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<tr>
<td>5. Need for Cognition</td>
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<td>2.23</td>
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<td></td>
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<td></td>
<td></td>
<td>-.34***</td>
<td>.38***</td>
<td>-.05</td>
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<td>0.68</td>
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<td></td>
<td></td>
<td></td>
<td>-.36***</td>
<td>.38***</td>
</tr>
<tr>
<td>7. Desire for Change</td>
<td>.85</td>
<td>2.81</td>
<td>0.52</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>-.10**</td>
</tr>
<tr>
<td>8. Cognitive Uncertainty</td>
<td>.85</td>
<td>2.57</td>
<td>0.56</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p < .05  ** p < .01  *** p < .001
religiousness, positively with Emotional and Cognitive Uncertainty, and negatively with Need for Cognition and Desire for Change.

Table 2 presents each of the positively scored statements from the Budner Scale along with the two associated translations. Of these 16 translations, 3 correlated negatively, 8 non-significantly, and 5 positively with the corresponding Budner item. Reverse scored Budner statements and translations appear in Table 3. With these 16 translations, 10 correlated negatively, 5 non-significantly, and 1 positively with the relevant articulation of Intolerance of Ambiguity. Three of the Non-significant Christian Tolerance of Ambiguity items displayed negative item-to-total correlations and were eliminated (Table 2-item 7b and Table 3-items 5b and 7a). The Negative, Non-significant, and Positive Christian Tolerance of Ambiguity Scale, therefore, had 13, 13, and 6 items, respectively.

All three Christian Tolerance of Ambiguity measures displayed robust positive correlations with each other (see Table 4). Again, the hypothesis was that the Budner instrument would be confirmed as ideologically unbalanced if the Negative Scale correlated inversely with the Intolerance of Ambiguity, Extrinsic, and Emotional Uncertainty variables and directly with the Intrinsic, Religious Interest, Need for Cognition, Desire for Change, and Cognitive Uncertainty measures. As Table 4 demonstrates, the only exception to this predicted pattern of outcomes was a nonsignificant relationship between Negative Christian Tolerance of Ambiguity and Emotional Uncertainty. Although linked with higher Budner values, the other two Christian Tolerance measures also failed to correlate reliably with Emotional Uncertainty. In addition, they displayed direct associations with Intrinsic and Religious Interest scores and with a Cognitive Uncertainty measure that has predicted adjustment in previous research (Greco & Roger, 2001). The Non-significant Scale was associated with greater Desire for Change as well.

In summary, the only result not confirming the hypotheses of this investigation was a failure of Negative Christian Tolerance of Ambiguity to correlate inversely with Emotional Uncertainty. As in previous studies, Emotional and Cognitive Uncertainty displayed a direct linkage. Could the failure of the Negative Scale to predict lower levels of a more maladaptive Emotional Uncertainty be explained by its direct covariance with a more adaptive Cognitive Uncertainty (Greco & Roger, 2001)? A test of that possibility was accomplished by examining the partial correlation between the Negative Scale and Emotional
Table 2  Correlations of Positively Scored Budner (1962) Scale Items with Possible Religious Translations for a Christian Tolerance of Ambiguity Scale

<table>
<thead>
<tr>
<th>Positively Scored Statement</th>
<th>Possible Translation</th>
<th>Inter-item Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. An expert who doesn’t come up with definitive answers probably doesn’t know much.</td>
<td>a. I value the advice of experts, but I understand that they cannot know everything because they are like everyone else in falling short of the perfection of God.</td>
<td>.00</td>
</tr>
<tr>
<td></td>
<td>b. Like everyone else, experts are sinful human beings who cannot know everything.</td>
<td>.01</td>
</tr>
<tr>
<td>2. There is really no such thing as a problem that can’t be solved.</td>
<td>a. Only in sinful pride can we assume that there is really no such thing as a problem that cannot be solved.</td>
<td>.10*</td>
</tr>
<tr>
<td></td>
<td>b. Since we see through a glass darkly, there will be problems that we cannot solve.</td>
<td>-.05</td>
</tr>
<tr>
<td>3. A good job is one where what is done and how it is to be done are always clear.</td>
<td>a. A good job is one that God wants me to do whether or not it is always clear what I should do or how I should do it.</td>
<td>.08*</td>
</tr>
<tr>
<td></td>
<td>b. In my work life, I should do what God calls me to do and not worry about whether I initially understand exactly what should be done.</td>
<td>.08*</td>
</tr>
<tr>
<td>4. In the long run, it is possible to get more done by tackling small, simple problems than large complicated problems.</td>
<td>a. We get more done if we stick to the small, simple problems and leave the large, complicated problems to God. (R)</td>
<td>-.17***</td>
</tr>
<tr>
<td></td>
<td>b. Sometimes God expects us to make progress by tackling large, complicated problems rather than trying to concentrate only on small, simple problems.</td>
<td>.02</td>
</tr>
<tr>
<td>5. What we are used to is always preferable to what is unfamiliar.</td>
<td>a. Sometimes God wants us to embrace completely new, unfamiliar experiences as a way of becoming more mature.</td>
<td>.11**</td>
</tr>
<tr>
<td></td>
<td>b. God teaches us that what we are used to is always preferable to what is unfamiliar. (R)</td>
<td>-.10*</td>
</tr>
<tr>
<td>6. A person who leads an even, regular life in which few surprises and unexpected happenings arise, really has a lot to be grateful for.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Table 2 (cont.)

<table>
<thead>
<tr>
<th>Positively Scored Statement</th>
<th>Possible Translation</th>
<th>Inter-item Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>a. We should be grateful for the surprising and unexpected happenings that God uses to enrich our lives.</td>
<td></td>
<td>.10*</td>
</tr>
<tr>
<td>b. A day of unexpected challenges and surprises is a blessing that God uses to make us more complete human beings.</td>
<td></td>
<td>.08</td>
</tr>
<tr>
<td>7. I like parties where I know most of the people more than ones where all or most of the people are complete strangers.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. I find it exciting to meet complete strangers because they show me new ways in which the image of God can be expressed.</td>
<td></td>
<td>-.05</td>
</tr>
<tr>
<td>b. I am only happy when I'm with people from my own faith community, and I find that I am uncomfortable to be around complete strangers. (R)</td>
<td></td>
<td>-.03</td>
</tr>
<tr>
<td>8. The sooner we all acquire similar values and ideals the better.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. My faith teaches me that the way to a better world is through a loving acceptance of diversity in values and ideals.</td>
<td></td>
<td>-.01</td>
</tr>
<tr>
<td>b. God teaches us to love and accept only those who share our values and ideals. (R)</td>
<td></td>
<td>-.14***</td>
</tr>
</tbody>
</table>

* p < .05 ** p < .01 *** p < .001
1 Statements followed an “R” were reverse scored (i.e., expressed a Christian intolerance rather than tolerance of ambiguity).
<table>
<thead>
<tr>
<th>Positively Scored Statement</th>
<th>Possible Translation</th>
<th>Inter-item Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. I would like to live in a foreign country for a while.</td>
<td>a. God expects us to be contented at home rather than to have desires to live in a foreign country for a while. (R)</td>
<td>-0.24***</td>
</tr>
<tr>
<td></td>
<td>b. The excitement of living in another society is just another blessing that God has made available to us.</td>
<td>-0.09*</td>
</tr>
<tr>
<td>2. People who fit their lives to a schedule probably miss most of the joy of living.</td>
<td>a. God expects us to fit our lives into a set schedule. (R)</td>
<td>-0.14*</td>
</tr>
<tr>
<td></td>
<td>b. People of faith should follow God's leadings, even when it contradicts their own plans.</td>
<td>0.09*</td>
</tr>
<tr>
<td>3. It is more fun to tackle a complicated problem than solve a simple one.</td>
<td>a. God wants us to grow in intelligence and wisdom, and that is why I find it more satisfying to tackle a complicated problem than to solve a simple one.</td>
<td>-0.09*</td>
</tr>
<tr>
<td></td>
<td>b. The most satisfying life comes from using our God-given talents to solve the complicated problems that he sends us in order to improve our abilities.</td>
<td>0.02</td>
</tr>
<tr>
<td>4. Often the most interesting and stimulating people are those who don’t mind being different and original.</td>
<td>a. In my experience, the most interesting and stimulating religious people have been those who don’t mind being different and original.</td>
<td>-0.18***</td>
</tr>
<tr>
<td></td>
<td>b. For me, the most stimulating and interesting Christians are those who have the courage to be different and original just as our Lord was different and original.</td>
<td>-0.24***</td>
</tr>
<tr>
<td>5. People who insist on a yes or no answer just don’t know how complicated things really are.</td>
<td>a. God sent us the Holy Spirit so that he could guide us beyond our simplistic yes and no answers.</td>
<td>-0.05</td>
</tr>
<tr>
<td></td>
<td>b. People who insist on a yes or no answer are the ones who are being faithful to God. (R)</td>
<td>-0.06</td>
</tr>
<tr>
<td>6. Many of our most important decisions are based upon insufficient information.</td>
<td>a. Faith is essential because our most important decisions are based upon insufficient information.</td>
<td>-0.12**</td>
</tr>
<tr>
<td></td>
<td>b. Prayer is central to life because many of our most important decisions are based upon insufficient information.</td>
<td>0.00</td>
</tr>
</tbody>
</table>
Table 3 (cont.)

<table>
<thead>
<tr>
<th>Positively Scored Statement</th>
<th>Inter-item Correlation</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. Teachers or supervisors who hand out vague assignments give a chance for one to show initiative and originality.</td>
<td></td>
</tr>
<tr>
<td>a. Good preaching gives us clear, unambiguous answers and does not assume that we have the initiative and creativity to solve our own problems. (R)</td>
<td>.02</td>
</tr>
<tr>
<td>b. God gave us free will so that we can develop our initiative and creativity.</td>
<td>-.09*</td>
</tr>
<tr>
<td>8. A good teacher is one who makes you wonder about your way of looking at things.</td>
<td></td>
</tr>
<tr>
<td>a. Religion accomplishes one of its most important roles when it helps you question your own way of looking at things.</td>
<td>-.15***</td>
</tr>
<tr>
<td>b. A good religious faith is one that makes you wonder about your way of looking at things.</td>
<td>-.14***</td>
</tr>
</tbody>
</table>

* p < .05 ** p < .01 *** p < .001

1 Statements followed an “R” were reverse scored (i.e., expressed a Christian intolerance rather than tolerance of ambiguity).
Table 4  Correlations of Religious Tolerance of Ambiguity Measures with Intolerance of Ambiguity, Religious Orientation, Need for Cognition, and Uncertainty Response Scales (N = 648)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Christian Tolerance of Ambiguity Items</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Negative</td>
</tr>
<tr>
<td>Negative Items</td>
<td>–</td>
</tr>
<tr>
<td>Nonsignificant Items</td>
<td>–</td>
</tr>
<tr>
<td>Positive Items</td>
<td>–</td>
</tr>
<tr>
<td>Intolerance of Ambiguity</td>
<td>–.14**</td>
</tr>
<tr>
<td>Intrinsic Religious Orientation</td>
<td>.32***</td>
</tr>
<tr>
<td>Extrinsic Religious Orientation</td>
<td>–.19***</td>
</tr>
<tr>
<td>Religious Interest</td>
<td>.29***</td>
</tr>
<tr>
<td>Need for Cognition</td>
<td>.20***</td>
</tr>
<tr>
<td>Emotional Uncertainty</td>
<td>–.02</td>
</tr>
<tr>
<td>Desire for Change</td>
<td>.27***</td>
</tr>
<tr>
<td>Cognitive Uncertainty</td>
<td>.17***</td>
</tr>
<tr>
<td>Descriptive Statistics</td>
<td>α</td>
</tr>
<tr>
<td></td>
<td>.67</td>
</tr>
<tr>
<td></td>
<td>.84</td>
</tr>
<tr>
<td></td>
<td>.82</td>
</tr>
</tbody>
</table>

* p < .05  ** p < .01  *** p < .001
Uncertainty after controlling for Cognitive Uncertainty. A small, but statistically reliable inverse partial correlation did in fact appear (−.09, p < .05).

Discussion

Research based upon a quantitative measurement paradigm largely dominates the contemporary psychology of religion. Within frameworks typically associated with that paradigm, data for the Budner (1962) Scale could have been used to offer a generally negative assessment of religion. All three religious variables correlated positively with this Intolerance of Ambiguity measure, which also predicted higher Emotional and Cognitive Uncertainty and lower Need for Cognition and Desire for Change. In addition, Religious Interest Ratings and the Intrinsic Scale displayed direct linkages with a Cognitive Uncertainty measure that was associated with greater Emotional Uncertainty and diminished Desire for Change. The low internal reliability of the Budner Scale plus failures of the Intrinsic Scale to correlate directly with Emotional Uncertainty and inversely with Need for Cognition did suggest problems for a critical evaluation of religion based upon these findings alone. Still, within the quantitative measurement paradigm, a reasonably “objective” interpretation of these results alone would have been that religious commitments predicted personal inabilities to cope with uncertainty.

Within a religious frame of reference, however, any such conclusion would have been “objectively unbalanced.” The “unbalance” would have been “objective” because empirical methods demonstrated how empirical methods produced a misleading ideological positioning of religion. This was true because religious individuals articulated their own interpretation of what a tolerance of ambiguity might mean, and that interpretation was expressed in a scale documenting how Christian commitments might promote an ability to cope with uncertainty. This Negative Christian Tolerance of Ambiguity Scale correlated inversely with the Budner measure and was linked with relatively more adaptive religious and psychological functioning. Specifically, this scale was associated with a lower Extrinsic Religious Orientation and with a higher Religious Interest, Intrinsic Religious Orientation, Need for Cognition, and Desire for Change, along with a greater Cognitive Uncertainty that previously has been
identified as an index of adjustment (Greco & Roger, 2001). Partial correlations controlling for Cognitive Uncertainty also uncovered a small, though reliable tendency of the Negative scale to correlate inversely with Emotional Uncertainty.

Further evidence of ideological complexities appeared in data for the Non-significant and Positive Christian Tolerance of Ambiguity Scales. While correlating directly with Religious Interest and an Intrinsic Religious Orientation, these two measures also paradoxically predicted a greater tolerance and a greater intolerance of ambiguity. Ideological dimensions of this paradox were obvious in the fact that tolerance was expressed in Christian language whereas intolerance was operationalized in nonreligious terms. Both scales also were associated with the more adaptive Cognitive Uncertainty construct, and a linkage with Desire for Change revealed that the Non-significant Scale not only described an ability to cope with uncertainty, but also a motivation to seek it. Like the Negative Scale, therefore, these other Christian measures supported very different conclusions from those based upon Budner Scale data.

Consideration of specific Positive Scale items perhaps suggested additional insights into the role of ideology in the psychology of religion. One Budner Scale item, said, for example, "What we are used to is always preferable to what is unfamiliar." A Positive Scale Christian translation said instead, "Sometimes God wants us to embrace completely new, unfamiliar experiences as a way of becoming more mature." At the level of surface logic, respondents therefore seemed to violate the law of non-contradiction in that they simultaneously seemed to assert a position and its denial. One explanation of this apparent "irrationality" might be that confident application of the law of non-contradiction can occur only within but not between ideological surrounds. If that proves to be so, researchers should be cautious in interpreting supposedly "objective" findings about religious commitments based upon nonreligious measures, which is precisely the argument of the Ideological Surround Model. A further implication is that a deeper logic may be essential in bringing ideologically contrasting frameworks into alignment with the law of non-contradiction. Hermeneutical empirical methods might be useful for that purpose.

Even more specifically, the present data suggested that psychologists of religion might need to be cautious when using the Budner (1962) Scale. This Intolerance of Ambiguity measure appeared to be
ideologically biased against religious individuals. Indeed, a conclusion that this scale should never be used in the psychology of religion would not be wholly unwarranted. The more important and general implication, however, was that an exploration of empirical translation schemes might be essential in coming to definitive conclusion about numerous other findings in the psychology of religion. Especially when a psychological instrument supports a negative assessment of religious commitments would it be important to see if that scale could be translated into a religious language that pointed toward different conclusions.

In this study, hermeneutical empirical methods were used to encourage a more balanced assessment of Christian commitments. Balance should not be confused with a simple apologetics, however. Instead, a more balanced understanding presumably should apply to research into all forms of commitment. Religious ideological surrounds might promote as objectively unbalanced an understanding of secular (and other religious) communities as vice versa. Balance in the analysis of all communities presumably would be crucial to any meaningful form of “objectivity.”

Just because a community can be evaluated in more balanced terms along some dimensions of psychosocial functioning does not mean that it will be defensible along all dimensions. Even in circumstances in which a community is better able to explain itself using its own language also does not mean that its intra-ideological explanation will have full empirical validity when examined with appropriate methodologies. In a world of ideological conflicts, attempts to promote understanding within and between communities will likely meet with these and numerous other challenges. Again, any attempt to meet those challenges will undoubtedly require avoidance of any simple apologetics for any one particular position or another.

At the same time, however, the Ideological Surround Model assumes that no ideologically neutral perspective will ever be available for conducting research in the psychology of religion (Nietzsche, 1887/1967, p. 119; Watson, 2004). Even the most cautious researcher will necessarily assume a perspective that at least implies some complex apologetics for a particular position. A completely objective neutrality will be impossible. A perspectival objectivity may be the most defensible option. In other words, researchers may need to be as objective as possible from a particular perspective, but may also need to remain aware of how their observations are conditioned by their
own point of view and also how observations will appear from other perspectives. The goal might not only be to report as accurately as possible the perspectival relativity of all forms of understanding. An additional hope might be the development of a meta-perspective useful in nurturing trans-ideological communication and understanding.

As in numerous previous projects, hermeneutical empirical methods once again proved to be useful, but that utility in no way argued against other approaches to research. Investigations operating wholly within the more dominant quantitative research paradigm as well as studies relying upon more purely hermeneutical procedures will undoubtedly be best suited to explore one or another issue in the psychology of religion. Polarized evaluations of quantitative versus qualitative methodologies should surely be avoided. A full range of procedural options presumably should be employed, and that range should include pure and hybrid forms of both methodologies. True progress in the psychology of religion will likely require methodological pluralism (Roth, 1987).

In conclusion, this study suggested that the Budner (1962) Intolerance of Ambiguity Scale should be added to a growing list of psychological constructs in which ideological factors deserve at least some consideration. One Christian Tolerance of Ambiguity translation said, “I value the advice of experts, but I understand that they cannot know everything because they are like everyone else in falling short of the perfection of God.” Even those experts in the psychology of religion who doubt the existence of God might embrace one sentiment lying behind this statement. The psychology of religion may require an epistemological humility. Given the unavoidable conflicts that exist among ideological surrounds, an expert tolerance of ambiguity may be absolutely essential to an “objectively balanced” psychology of religion.

References


THE QUEST FOR OBJECTIVITY IN PSYCHOLOGY OF RELIGION: DO WE NEED THE IDEOLOGICAL SURROUND MODEL AND CHRISTIAN TRANSLATIONS OF SCALES?

Ulrike Popp-Baier

ABSTRACT

In my comment on the article Christian Tolerance of Ambiguity I argue that we do not need an Ideological Surround Model for achieving a kind of “balanced objectivity” in the psychology of religion. In addition, I argue that the distinction between two ideological surrounds is much too simple with regard to the debates and controversies among psychologists of religion concerning the “good” theoretical concepts and empirical methods and the “evil” ones. I also formulate some problems I have with the suggested Christian translation of the Budner Scale.

If I have understood the article Christian Tolerance of Ambiguity correctly, the authors argue that despite their rigorous scientific procedures, studies in psychology of religion can never be wholly objective. They suggest that simultaneously examining issues within social scientific and religious ideological surrounds might make for a more “balanced objectivity”. To illustrate their point, they present an empirical study involving the Budner (1962) Intolerance of Ambiguity Scale, which has led to the conclusion that religion predicts an inability to cope with uncertainty. The authors attribute this result to an ideologically biased understanding of religious commitment which goes along with the norms of the Budner Scale and therefore translate the Budner Scale items into a language more compatible with religious beliefs. These Christian Tolerance of Ambiguity measures reveal that religiousness is associated with ability rather than inability to cope with uncertainty. The authors conclude that these conflicting results offer additional support for their concept of an ideological surround model for research in psychology of religion.

In this comment I would like to formulate some problems and objections I have concerning the authors’ Christian translation of the Budner Scale and their general suggestions for research in psychology of religion based on an ideological surround model.
First, I suppose that the authors do not think that their argumentation in their article belongs to one specific ideological surround. I suppose that the authors think that their reasons for the concept of this model are universally convincing, regardless of one’s ideology or one’s belief or disbelief in the existence of God, one’s acceptance or rejection of the “big bang” as the explanation for the origin of the world or whether or not one supports Darwinian principles. I imagine that the authors think that their arguments support their position and will be receptive to the arguments of the readers of their article. I expect that they will consider objections to their arguments carefully and will either improve or abandon their own argumentation, if they find the objections convincing, or will demonstrate why the objections are unfounded and the arguments fallacious.

Ideally, this is how “truth claims” are made, contested, defended etc. If we cannot accept this procedure as an ideal type, rational argumentation becomes impossible. In the traditional terminology, every postmodern claim about the plurality of knowledge, truth claims etc. needs to presuppose the culture-invariant acceptance of certain discursive procedures, in which different claims can be formulated, defended, contested etc. If we disagree with this procedure, we must stop now, as all further statements would be meaningless.

And that is, in my view, the legacy of the Enlightenment: the revelation of how we can and need to depend on reason and rationality which are not context-bound. The seeming contradiction between the positions of contextualism/pluralism and universalism cannot be defended.

When we argue in favour of or against “contextualism”, we are already relying on the following “solution” to this contradiction: universal are the procedures (e.g. of discussion and argumentation), plural are the contents which are at stake. The “contents” of reason are always context-bound because of language, history and power, but “rationality” is the condition of the possibility of speaking about language, history and power. Everybody who tries to formulate, explain and defend the contextuality of speaking and acting, and especially everybody who criticizes particular kinds of “bounded rationality” in order to change or to improve certain opinions or conditions is already relying on the possibility of rational arguments, of which the merits cannot be restricted to a certain ideological context.

Of course, the question that bothers the authors concerns their Christian orientation, which may not be shared by all readers of
their article. But this problem need not determine whether their arguments are acceptable, as it is the general question here of perspec-
tivism or particularism or “interested” research that is at stake and
may be formulated along similar lines by feminists, post-colonists etc.

Second—and the authors explicitly address this issue—what about
the so-called objectivity of empirical research in psychology of reli-
gion? Must we acknowledge that the results of this research depend
on norms and values and are therefore not wholly objective? Of
course, the empirical findings in psychology of religion depend on
norms and values, as do all empirical findings in any empirical
research programme. Still, these findings can be evaluated as “objec-
tive knowledge” in the context of a rational discourse.

Empirical research is always related to regulative ideas, as well as
to practical and technical norms and even to social conventions at
a meta-theoretical level. In psychological research, which follows the
hypothetico-deductive programme and relies on the so-called mea-
surement paradigm, for example, the ideal empirical research process
entails the following basic steps: the researcher deduces a specific
psychological hypothesis from a particular theory, which must be
tested empirically. This psychological hypothesis is usually a state-
ment about the relationship between (values of) variables. The next
step is known as the operationalization of the variables and the deter-
mination of the population for which the statement is supposed to
be valid. The researcher then derives a hypothesis, which may be
verified statistically (known as the null hypothesis), and a research
design is drafted as a plan for implementing the operations and ver-
ifying the null hypothesis. In short, all these procedures for con-
ducting empirical research require decisions and choices that refer
to norms, values and even conventions. (Only by custom, for exam-
ple, do social researchers generally accept as statistically significant
outcomes with a p-value of .05, cf. e.g. Bernhard, 2000). The results
of all these rather complicated procedures need to undergo critical
evaluation and interpretation to eventually confirm or refute the psy-
chological hypothesis. The so-called empirical test of statements is
always connected to a whole system of assumptions about the entire
research process. We can therefore never be sure which part of the
whole is responsible for the negative outcome of the test. Moreover,
even if the results initially appear to confirm our hypothesis, we need
to interpret our empirical results and discuss our reasons for inter-
preting them as sustaining a particular hypothesis. We may question
some characteristics of our sample, the adequacy of our operationalizations or the psychological relevance of the—perhaps only statistically—significant results etc.

In short, designating specific empirical “findings” as valid or objective knowledge necessarily results from a critical reflexive evaluation of the research process in which we have produced these “findings” and is not the somewhat automatic result of the application of particular methods, models and techniques. First, therefore, every researcher must consider carefully how particular prejudices or preferences may have influenced different decisions in the research process and may have distorted the construction of the empirical findings. But self-reflexivity is not enough. We cannot detect our own blind spots and are unaware of most of our prejudices or preferences that guide our research. Therefore, we need a corrective measure, ideally the critical discussion of our research in a dialogue with competent others. If we can defend the different steps in our research process in such a dialogue, we can identify our empirical results as objective thus far. But we always need to include the qualifier “thus far” in our evaluation of the results of our empirical research as objective, because we never know whether someone might find good arguments to challenge the validity of our research results—maybe due to new empirical “findings” in other research contexts or due to new methodological considerations or methodical devices that shed a new light on the research process. The premise for this kind of critical dialogue to identify objective knowledge is the clearest possible description of the different steps in the research process and the related decisions and choices.

In psychology of religion the personal commitment or opposition of a researcher to a certain faith tradition may influence the research process, such as the choice of research questions, the construction of or preference for particular theoretical concepts and methods, interpretations of findings, explanatory concepts selected etc. But these commitments or engagements have in fact no other status than all the other possible prejudices or preferences that may influence the research process and may be evaluated in a critical dialogue to determine whether they have distorted different steps in the research process. Sometimes they may have, and other times they may not.

Personal commitments can also surface as particular values that guide the formulation of the research problem. But that is not exclusively the case for research in psychology of religion. Max Weber (1904) pointed out that in the cultural sciences (Kulturwissenschaften)
all scientific research is related to certain “value ideas” (Wertideen). Without these value orientations, formulating a research question would be impossible. Our basic distinctions that allow us to formulate research problems are subjective and historically changeable values.

Many researchers accept a pragmatic view of science, which means that gathering knowledge always depends on a certain interest in knowing something and thus makes the knowledge relevant. “Value-free” in this context means that the interests that inspired a particular research program are generally defensible as worthwhile, as relevant or at least as acceptable (perhaps among other acceptable interests).

While I agree with the authors that we have to realize the perspectivist nature of all empirical methods, I disagree with their conclusions based on this statement. I do not think that we need a more “hermeneutical empiricism” or specific empirical procedures to handle perspectivism. As I have tried to outline above, psychological research related to the so-called measurement paradigm is sufficiently versatile to address all the questions related to the perspectivist nature of our empirical methods. Aside from these “mainstream methodologies” we also have so-called interpretative approaches with methods like participant observation, phenomenological analyses, narrative analyses, conversation analyses, discourse analyses etc. All these methodologies address the question of objectivity and discuss the different possibilities to achieve objective knowledge, not by eliminating subjectivity but by transcending subjective biases related to the different steps in the research process as much as possible.

Concerning the subjective biases due to world views or religious commitments that may distort empirical psychological research, fine examples are now available of cases in which these distortions have been discovered through critical evaluation of the research programme concerned and eventually eliminated. One example appears in the book by Spilka, Hood, Hunsberger and Gorsuch (2003, p. 390): the original version of the Minnesota Multiphasic Personality Inventory (MMPI), a measure widely used to assess pathological personality, for example, included frequency of prayer and other specific items meaningful within particular religious groups. These items include items like “Christ performed miracles such as changing water into wine”. The agreement with this and other religious items was scored to indicate pathology. The consequence is that a certain religious commitment, for example commitment to a more conservative, orthodox or fundamentalist Christian community, indicates psychopathology and can be
evaluated as a serious distortion of a psychological test. Fortunately, the revised version of this test (MMPI-2) no longer uses explicitly religious items.

Do we need to be orthodox or fundamentalist Christians or to have other strong religious commitments to understand this problem and to be willing to overcome this bias in a test? Do we even need the concept of an ideological surround to detect this problem? Do we not only use the usual criteria to evaluate a test and its validity with regard to the population we want to use it for? Is it not merely a question of critically evaluating some operationalizations obviously distorted due to ignorance concerning religious beliefs and commitments?

If I have understood the authors correctly, then the concept of the Ideological Surround Model has been formulated to heighten awareness of these kinds of distorting subjective influences in psychological research. In my opinion, however, an advance, general identification of particular “ideological surroundings” that influence research in psychology of religion, such as for example a naturalistic ideological surround and a religious ideological surround, is pointless. These dichotomous distinctions are too general to sensitize for the multitude of influences in the plurality of research programmes that form the reality of research in psychology of religion. The authors describe the naturalistic ideological surround as including the big bang as the supposed origin of the universe and a Darwinian explanation of specification which—in their view—entails a naturalistic system of “good” and “evil” concerning the norms about what is and is not acceptable in the analysis of religion. Everything inconsistent with reductive materialism will tend to be evaluated as “evil”. And even implicit commitment to this naturalistic value system would unite a researcher with a large community of like-minded scholars. The authors are less clear in their description of the religious ideological surround. If I have understood them correctly, decisive features of the religious surround are theistic explanations of the origins of the universe and of the diversity of life.

The authors argue that all research in psychology of religion that relies on “the scientific rigor of empirical methods” will inevitably be based on the ideological assumptions of the naturalistic ideological surround. But that does not mean that this research has to be rejected. It has to be accomplished through research based on the ideological assumptions of the religious ideological surround.

Again, I wonder whether this distinction between two ideological
The quest for objectivity in psychology of religion is perhaps far too simple? Can we really speak of a community of like-minded scholars? Do psychologists of religion not have extensive differences and debates, controversy and contest concerning the “good” theoretical concepts and empirical methods and the “evil” ones? Consider, for example, the supporters of what is known as the measurement paradigm and their often harsh criticism of colleagues who prefer interpretive approaches. And think of the equally harsh controversies between phenomenologists and grounded theorists, who are both labelled as adherents of interpretive approaches and even of the controversies between supporters of different versions of the grounded theory approach. And what about the study of mysticism? What about the debate between “constructivists” and “decontextualists” (cf. for example Katz, 1978; Forman, 1998)?

The same holds true for scholars of religion. The diversity among “religionists” is vast—even among Christian “religionists”—concerning the “good” and the “evil” in the analysis of religion. Moreover, many supporters of liberal theology, feminist theology, liberation theology or postcolonial theology will not argue about the big bang or reject a Darwinian explanation of speciation. Many would not bother about these questions, because they are concerned with other issues, such as equality, justice, peace, empowerment of the powerless, overcoming poverty, etc. The distinction between a scientific or naturalistic ideological surround on the one hand and a religious ideological surround on the other hand would merely veil this diversity and the multiple discourses, dialogues and loyalties, which not only relate to “science” and “religion” but also cut across these rather artificial dichotomies.

But the authors also discuss a slightly different problem, and we need to consider whether we might need an ideological surround model to address this problem adequately. According to the authors, particular scales usually associated with different research questions in psychology may conceptualize important human values in a language that is ideologically insensitive to a religious ideological surround. In this case, they suggest translating the scale into the language of a particular religious ideological surround, for example into a Christian one. The example they discuss in their article is the Budner (1962) Intolerance of Ambiguity Scale, which in their view offers an ideologically biased understanding of religious commitment. In this case, however, they do not discuss the meaning of the different items of this scale to demonstrate the ideological bias. The authors argue that the scale may be ideologically biased because the Budner Scale correlations
with Religious Interest, Religious Orientation, Need for Cognition and Response Uncertainty support the conclusion that religion predicts an inability to cope with uncertainty. Therefore, the authors have devised new scales expressing a Christian Tolerance of Ambiguity. Measurements according to these scales reveal that religiousness is associated with an ability rather than an inability to cope with uncertainty in a Christian population.

First of all, I have a problem with this so-called translation. When test items are “translated”, there must be a way to ensure the adequacy of the translation, for example with a translation—back translation design or by a committee consisting of different experts (and not only of Christian students). Eventually, there must be a way to check the equivalence of the instruments. Restricting myself to a kind of face value, I can merely conclude that the translation is not a translation at all but instead frames the different items and gives them a different meaning.

Let us, for example, examine the first item of the Budner Scale and one of its two Christian translations. The item expresses intolerance of ambiguity and—according to the authors—the translation expresses a Christian tolerance of ambiguity.

Budner Scale item
1. An expert who doesn’t come up with definitive answers probably doesn’t know much.

The authors translate this item as:
a. I value the advice of experts, but I understand that they cannot know everything because they are like everyone else in falling short of the perfection of God (Table 2, p. 25).

In my opinion, 1. expresses indeed a kind of intolerance of ambiguity, but a. does not express a kind of Christian tolerance of ambiguity. It consists of a belief statement (everyone falls short of the perfection of God), which is related to the experts (who belong to the category “everyone”). The statement about these experts therefore follows rather logically from the belief statement. The most important content of the item is thus a kind of syllogism, a kind of logical reasoning, which is quite different from the Budner Scale item that expresses an opinion, a subjective assessment.

Let us consider another example. In the study of the authors the Positive Christian Tolerance of Ambiguity Scales predicted a greater tolerance and a greater intolerance of ambiguity. The authors discuss
these “ideological complexities” by considering specific Positive Scale items, such as the following:

What we are used to is always preferable to what is unfamiliar (Budner Scale item)

Sometimes God wants us to embrace completely new, unfamiliar experiences as a way of becoming more mature (Positive Christian translation Scale item).

According to the authors, the respondents seem “to violate the law of non-contradiction in that they simultaneously seem to assert a position and its denial. One explanation of this apparent ‘irrationality’ might be that confident application of the law of non-contradiction can occur only within but not between ideological surrounds” (p. 16). In my opinion, the respondents do not violate the law of non-contradiction. Nor is there any “apparent irrationality” to explain, because the second statement is not a “positive” translation of the first “negative” statement and is therefore not a rejection of the first statement either. In fact, the two statements can be perfectly compatible for Christian believers: the second statement formulates a kind of exception to the rule, which is formulated in the first statement. The relation is not perfect, because of the word “always” in the first statement. Let us assume, however, that the respondents do not dwell on the meaning of “always” when they read the two sentences. They can then easily combine the two items: “what we are used to is always preferable to what is unfamiliar, (but) sometimes God wants us to embrace completely new, unfamiliar experiences as a way of becoming more mature.”

In short, the Christian Tolerance of Ambiguity Scale is in my opinion not a “translation” of the Budner Scale. I have the impression that it measures a kind of “religiousness” but nothing else.

Nonetheless, I believe that the authors make a good point, when they submit that in psychological research in the field of religion scales are often inadequate with regard to the cultural complexities in this field. The main issue is in my opinion the diversity—not among the psychologists of religion on the first place—but among the subjects addressed by psychologists of religion, in short, the diversity in the field, which is often described with labels such as “(sub)cultures”, “milieus”, “communities”, “identities” etc. We are often aware that testing general hypotheses with “religion” as a variable operationalized in test items makes little sense. Instead, our primary interest is learning about the religious beliefs, experiences and practices of our research
partners. We are interested in the way religious orientations have been developed or acquired, how are they sustained, negotiated or sometimes abandoned, and how they are used to relate to the world and to other people. In short, we want to know how people are religious, instead of how religious people are—as Taylor (1976) has formulated. Then we need “hermeneutical methods”. We have to rely on field work in a broad sense and need to analyse life worlds, life forms, social practices, narratives, conversations, discourses etc.

The meta-theoretical and methodological aspects of this research have been broadly discussed—especially within cultural anthropology. Researchers such as Gerd Baumann, for example, defend a theory of culture “that understands differences as relational, rather than absolute. It recognizes that there are many different cleavages of identification and that these cleavages cut across each other. Instead of viewing society as a patchwork of five or fifty cultural groups, it views social life as an elastic and crisscrossing web of multiple identifications” (Baumann, 1999, p. 139). If we accept this view as our meta-theoretical presupposition for studying how people practice religion, we cannot take the concept of a certain religious sub-culture with a clear-cut ideology and sharp boundaries as our starting point. We have to start with pre-concepts, sometimes only vague ideas or questions that will be elaborated, refined or changed or perhaps abandoned only in the course of the empirical research. Scales—in whichever language—are simply not sufficiently sensitive for the processes to be addressed in this context. In my opinion, the model of an ideological surround has no heuristic value with regard to this kind of research.

We have learned from postcolonial thinking that “dialogue” has to be a core concept in culturally sensitive empirical research conceptualized as field work. Data gathering and data analysis are basically dialogical processes, and the validation of the research results requires dialogues between different participants in the research process. The eventual goal of this kind of research is not simple “objective knowledge”, but “transsubjective knowledge”, as a contribution to a hermeneutical culture where the solutions to conflicts are still believed to lie in dialogue, understanding and reasoning, rather than in violence. Alternatively, this kind of research can help prevent Huntington’s (1996) vision of a war of cultures from becoming reality.
References


ARE MEASURES OF RIGIDITY BIASED AGAINST RELIGIOUSLY COMMITTED INDIVIDUALS?:
A QUESTION THAT STILL NEEDS TO BE ARTICULATED AND ANSWERED

Ralph L. Piedmont*

ABSTRACT

This report provides a critique of the target article’s premise that measures of rigidity are biased against religiously committed individuals. The report is found to have serious conceptual and methodological problems that undermine its contribution. Conceptually, the paper does not demonstrate that rigidity scales are indeed biased, as that term is used in the field of psychometrics. Methodologically, the paper suffers from multiple weaknesses, including not demonstrating that the “translated” items are comparable (both in terms of content and empirical relatedness) to the original items they are intended to replace, the presence of multi-collinearity among the measures, and inconsistent patterns of convergent correlations for the “new” scale. As such, the target article is unable to provide any credible scientific support for its claims.

In response, this paper argues that a more sophisticated understanding of the constructs of rigidity and religious commitment can make sense of this claimed “bias”.

The basic premise of the target article was that current measures of rigidity or intolerance of ambiguity are biased against religiously committed, Christian individuals. Such persons usually score high on measures of rigidity and this is often interpreted as being diagnostic of larger emotional problems. The reason for this positive correlation is the assertion that the ideological background of science itself is intrinsically oriented to view such commitments as negative. As such, scales working from this scientific/empirical position create items that negatively portray religious involvements. However, the authors contend that such a bias can be overcome by creating items that are sensitive to religious sentiments. In other words, it is possible to “...translate each item from a psychological scale into a language...”

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that is more ideologically compatible with religious commitments” (p. 7). In this manner, a new scale can emerge that captures tolerance for ambiguity (or its absence) from a perspective that is consistent with a Christian orientation. Although the authors of the current report do not state it, the empirical goal is to show that the new scale, which should correlate very highly with the original scale, does not correlate with those pathological qualities found in the original. Thus, the construct validity of the new scale should be different from the original scale in some important, predetermined ways.

The methodology employed for this study is one usually reserved for translating scales from one language to another. The objective of such cross-cultural research is to identify items in the new language that are correlated to those in the original language. The goal of this process is to create a scale that will, ideally, evidence factorial and mean level equivalence (i.e., the new scale has the same factor structure and generates the same means and standard deviations as the original). For the purposes of the current report, the authors were interested in creating Christian-oriented items that reflected the same content as the original items. However, the new items would not be biased against a religious commitment. Using the 16-item Budner scale as the criterion, two Christian-equivalent items were generated for each original item. In an attempt to control for acquiescence, the Budner scale has half of its items negatively reflected (i.e., present rigidity in such a way that one needs to disagree with the item in order to score high on rigidity, for example, “I would like to live in a foreign country for a while”).

There are a number of methodological problems with this study that prevent it from accomplishing its goal. Keeping in mind that the objective of any translation process is to create an equivalent form to the original, it is necessary to demonstrate that the new items correlate significantly with the original items they hope to replace. In examining the results of the current study, this is clearly not the case. Table 2 presents the correlations between the new translated items and the original items that are positively phrased. Of the 16 correlations, only five are significant, and two of those are in the wrong direction! It is not clear to me why two translated items were included that were written in the opposite direction of the item they were intended to replace. The authors indicate that these items should be reverse scored themselves, but closer inspection of the items’ content shows that these “reversed” items are really
not reversed at all. For example, for translated item 4a it is not clear how the statement, “We get more done if we stick to the small, simple problems and leave the large, complicated problems to God” is the opposite of the original item, “In the long run, it is possible to get more done by tackling small, simple problems than large complicated ones”. A similar point is found with translated item 8a. Apparently, the need to reverse score these items was driven more by the post-hoc observed actual correlation than a consideration of the items’ content. If this were not the case, it is not logical why the authors would include reverse scored items in this section when half the test is already reverse scored.

A similar problem arises in Table 3. Here, the reverse-scored items are being translated. Again, because the translated items are replacements for the originals, they should also be phrased in the negative direction. Consequently, correlations between the original and translated items should all be positive. This is not the case. Of the 16 correlations, 11 are significant and all but one is negative. For some items (e.g., 1a), it is because the authors wrote a reverse scored item. Again, why the authors included a reverse scored item to replace an item that is itself already negatively reflected is unclear and confusing. The majority of the other items appears on their face to be appropriate replacements, but empirically do not capture the content or intent of the original item (e.g., items 1b, 2a, 3a, 3b, 4a, 4b, 7b, 8a, and 8b). For example, item 4 is “Often the most interesting and stimulating people are those who don’t mind being different and original”. Translation “b” is “For me, the most stimulating and interesting Christians are those who have the courage to be different and original just as our Lord was different and original”. The two items seem very much identical, but yet are negatively related ($r = –.24$). The magnitude of this correlation is one of the largest in this section and does reflect some level of convergence, which is good, but why scores run in opposite directions is perplexing and unexpected. Perhaps the scoring of these items has been confused (i.e., items were recoded when they should not have been). Clearly, there are empirical inconsistencies that bear greater scrutiny and which undermine the value of these data.

Complicating the above difficulty is the fact that most of the replacement items do not correlate significantly with the items they are supposed to replace. For those that do (ignoring the issue with directionality), the magnitude of correlation is very low (all $r$’s < .24). The new
translated items do not seem to be adequate replacements for the original items. This lack of convergence is further reinforced in Table 4, where these items, grouped into scales, do not correlate higher than \( r = .26 \) with the total score on the original scale. Such a small magnitude of association indicates that the two instruments cannot be considered comparable scales. Convergent correlations between \( r = .50 \) to \( r = .70 \) would have been preferred (see Piedmont, in press). As things stand, there is no basis for concluding that the new scale is comparable to the original one. As such, any differences in external correlates can be attributed to the fact that the two scales represent different constructs, not because one scale is biased and the other is not.

A completely inappropriate methodological step in this study was assigning the translated items into three categories: those that correlated negatively, those that correlated positively, and those that were independent of the original items. At a minimum, those items that were independent of the Budner scale should have been discarded. Nonetheless, this trifurcation appears to have important logical implications for the study. As the authors stated on p. 10, “Specifically, a potential ideological misrepresentation of religion would be most obvious if the Negative Scale correlated inversely with the Budner, Extrinsic, and Emotional Uncertainty scales and directly with the Intrinsic, Religious Interest, Need for Cognition, Desire for Change, and Cognitive Uncertainty measures.” How this pattern of findings supports the hypothesis that the Budner is biased is unknown. The logic of this assertion has no parallel in the literature and, on its face, makes no apparent sense. For example, high scores on the Cognitive Uncertainty scale are associated with rigidity, so why predict it to be related positively to a scale that should be measuring the lack of rigidity? Aside from the unsound theoretical premises, the pattern of findings presented in Table 4 also provide a mix of logically inconsistent and contradictory findings as well, leading me to view the presented data with the utmost of suspicion.

Before examining the data in Table 4, we must first review the concept of a negative correlation. Keep in mind that a negative correlation does not mean that two variables are assessing independent qualities. Just the opposite, the two variables are measuring a similar construct, but just from opposite vantage points. The sign of a correlation only indicates the direction of relationship between two variables. For example, if high scores on the Budner reflect rigidity, then
a scale that correlates negatively with the Budner has high scores that reflect the lack of rigidity. But because the two scales are correlated (e.g., \( r > 0 \)), they are measuring a common construct, in this case, rigidity. It is the magnitude of the correlation coefficient that determines the extent of overlap between the two scales. In general, though, two negatively correlated scales should evidence similar patterns of correlations with external criteria, but the sign of those correlations will be opposite of one another. Therefore, it is not clear to me why those items that correlated negatively with the Budner scale were selected as the focal point for testing this assumption of religious bias. After all, those items measure the same rigidity construct as both the original Budner scale and the positive items!

With this in mind, an examination of the results in Table 4 reveals an odd pattern of findings. As expected, the negative items correlate negatively with the Budner scale (Intolerance of Ambiguity Scale). However, the negative items correlated positively and of similar magnitude as the Budner scale with the Intrinsic and Religious Interest scales (see Table 1). As noted above, one would expect these associations to be negative. Another inconsistent finding is observed in the positive correlation between the negative items and the Cognitive Uncertainty scale; high scores on which do represent rigidity. In summary, the data in Table 4 present a logically inconsistent pattern of results that speaks more to the psychometric chaos of these item clusters than to any substantive issue. Other oddities in Table 4 can be found with the inter-correlations among these translated item clusters. Why do the positive and negative item clusters correlate positively? Why do the items that were found to be uncorrelated with the Budner correlate so highly with the positive and negative items scales? These two correlations (.81 and .62, between the neutral item scale and the positive and negative items scales, respectively) are as high as the reliabilities of the positive (\( \alpha = .82 \)) and negative (\( \alpha = .64 \)) item scales themselves! These types of values are not found in psychometrically sound data sets and indicate, at a minimum, that there exists a high level of multi-collinearity among these scales that is biasing all the correlations in Table 4.

Methodologically the study is not able to demonstrate that the “new” Christian-oriented scale is indeed a valid measure of rigidity in general, or of the type of rigidity reflected in the Budner in particular. It is not clear what these translated items are really measuring given the complete lack of construct validity evidence for them. The
combining of items into the three distinct groups has no scientific basis whatsoever. Why the negatively correlated item scale would be preferred over the positively correlated item scale is never outlined or discussed. Both types of items are measuring the same construct. Statistically, the findings are very inconsistent and in some cases, just illogical. Either a mistake has been made in reporting whether a correlation is positive or negative or the data are just distorted in some way (e.g., non-normal distributions or violations in the assumptions underlying the analyses).

What this study also failed to demonstrate was that the Budner scale is biased. This claim is founded on the finding that religiously committed individuals score high on rigidity. The authors appear to be disgruntled with this fact and seem intent on somehow discrediting it. Exactly how the religiosity-rigidity relationship constitutes a bias is never developed scientifically. Bias has very specific meanings in the assessment arena (e.g., Cole, 1981) and the authors do not provide any demonstration of bias according to these criteria. To me, this whole report reads more as a case of ruffled sensibilities than an effort at discussing objectivity versus bias in scientific paradigms. My concern is that this confused and fragmented study will only serve to inflame misguided passions.

The consistent fact that religiously committed individuals score high on rigidity scales does make sense conceptually. An individual’s decision that a particular idea or set of behaviors is to be preferred to the exclusion of others forms the basis of what rigidity is all about. Religious commitment means that a person has decided that certain beliefs and practices are the “right” behaviors and need to be complied with. Other options are dismissed, minimized, or just not considered. Religiously committed individuals (and those who are rigid or closed to experience in general) also have a tendency to accept authority and honor tradition. There is little desire to reexamine personal values. This is what commitment is about: a pledge to do something, and to be bound to a course of action. By making a commitment to one option, one is automatically closing the door to others.

But being rigid should not automatically be considered a negative. Rigidity is also the foundation to fidelity. One cannot maintain relationships or achieve personal goals without being focused and persevering in specific actions and behaviors. Such a quality does have very important adaptive benefits. Further, such closedness is not, in and of itself, an indication of some type of defensive reaction,
nor does it imply any hostile intolerance or authoritarian aggression (Costa & McCrae, 1992, p. 15). In fact, there is plenty of evidence documenting religious involvement’s association with a number of positive physical and mental health outcomes (see Koenig, McCullough, & Larson, 2001). Naturally, we cannot also ignore the fact that there are liabilities to rigidity as well. Allport (1950) long ago acknowledged that religious involvements can also be nonproductive. Sometimes individuals reach out to religion in order to address the emotional disruptions in their own lives. They use religion as an external crutch to compensate for personal weaknesses. In this light, the rigidity of religious commitment may be a sign of something more maladaptive. Thus, the question should not be whether rigidity scales unfairly portray religiously committed individuals. Rather, the issue is to determine to what extent one’s faith commitment is life enhancing and energizing versus being confining and defensive.

The current report appears to confuse “bias” with a rather unflattering interpretation of a reliable finding. Perhaps we need to modify how we interpret certain findings. Or we may need to develop a more well-rounded understanding of what our psychological constructs mean about individuals. However, despite the claims of the target article, whether certain personality variables are biased against religiously committed individuals is a question still in need of cogent articulation and rigorous empirical examination.

References

FRIENDS OF THE TRUTH, VIOLENCE, AND THE IDEOLOGICAL SURROUND: SOCIAL SCIENCE AS MEETINGS FOR CLEARNESS

P. J. Watson

ABSTRACT

In response to criticisms of the use of the Ideological Surround Model to analyze Tolerance of Ambiguity, emphasis is placed on how the methodologies of this model operate from Christian pacifist assumptions. This model seeks to promote social scientific methodologies that will allow competing perspectives to obtain increasing clarity on points of conflict.

Professors Piedmont and Popp-Baier have thoughtfully responded to our analysis of the Budner (1962) Intolerance of Ambiguity Scale. Each has articulated a critique that insightfully reflects the perspectives in which they operate. Unsurprisingly, neither has proffered arguments that could be described (to use Professor Popp-Baier’s terms) as “unfounded” or “fallacious” relative to their own somewhat non-empirical, normative, and sociological, or in other words, relative to their own ideological commitments. Quibbles might be made about how some of their more minor claims are coordinated within their own larger frames of reference. But such details are not the main issue; or at least, the assumption of the Ideological Surround Model is that such details are not the main issue. The real challenge involves the frames of reference in the first place. How is it possible to resolve disagreements among individuals who work across the seemingly infinite array of possible ideological polarizations?

A question like this can be deeply disturbing. Professor Popp-Baier implies that a focus on such concerns can lead to the obscurantism of an anti-rational relativism. She acclaims instead the “legacy of the Enlightenment: the revelation of how we need to depend upon reason and rationality which are not context-bound.” She agrees that our paper correctly identifies the importance of diversity in the psychology of religion, but in a misleading way: “The main issue is in my opinion the diversity—not among the psychologists of religion on the first place—but among the subjects addressed by psychologists in the field,” the various “(sub)cultures” and “communities” that
these psychologists study. That diversity is what must be explained in order to promote a dialogue and that helps “prevent Huntington’s (1996) vision of a war of cultures from becoming a reality.”

Like Professor Popp-Baier, the Ideological Surround Model is animated by worries about anti-rational relativism and about a “clash of civilizations” (Huntington, 1996). The Ideological Surround Model, nevertheless, adopts a fundamentally different approach to such concerns. A principal purpose of the Intolerance of Ambiguity study was to illustrate only one among several specific empirical methods associated with the model and to relate it to only one among the nearly infinite array of potential ideological polarizations (cf., Watson, 1993). The critiques of Professors Piedmont and Popp-Baier now make it possible to more deeply discuss the broader philosophical issues.

Enlightenment within an Ideological Surround

Responses to two quotes by Professor Popp-Baier will be useful in sketching the central philosophical conflicts that exist between the Ideological Surround Model and these two critics. First, Professor Popp-Baier says, “I suppose that the authors do not think that their argumentation . . . belongs to one specific ideological surround. I suppose that the authors think that their reasons for the concept of this model are universally convincing, regardless of one’s ideology or one’s belief or disbelief in the existence of God.” That supposition is wrong. During times of postmodern pluralism, beliefs like this run the risk of being untruthful and of promoting an anti-rational obscurantism. This is so because for at least some, “Postmodernity is not so much abandonment of the idea of universal truth as it is the abandonment of the assumption that such truth will be readily apparent and thus accepted by anyone of right mind” (Weaver, 2001, p. 109).

A fundamental assumption of the Ideological Surround Model is that all argumentation is a product of ideology. This principle is as applicable to the model itself as it is to the Enlightenment or any other intellectual legacy. Again, to advocate such a proposition in no way necessitates anti-rational relativism (Weaver, 2001). Instead, an interpretation of all argumentation as ideological accurately describes important empirical realities of contemporary social life and to believe otherwise would be untruthful and irrational. Like Professor Popp-Baier, the model rejects relativism, but simultaneously denies that
the Enlightenment legacy has been able to avoid all obscurantism.
The potential obscurantism of the Enlightenment can be illustrated
by responding to a second of Professor Popp-Baier’s quotes.

After asserting her Enlightenment belief that rationality is not
“context-bound,” Professor Popp-Baier claims, “The seeming contra-
diction between the positions of contextualism/pluralism and univer-
salism cannot be defended.” She then essentially rejects the terms
of her own dilemma by defending the rationality of a contextual-
universalism. Citing important distinctions made by Weber, she states,
for example, that value orientations “allow us to formulate research
problems” that are based “upon subjective and historically change-
able values.” This requires a “pragmatic” response in which research
programs are “value-free” because they can be tolerated by those
prominent contemporary “interests” that are “generally defensible as
worthwhile,” “relevant or at least . . . acceptable.”

Later, she adopts the recommendations of one of those “accept-
able” contemporary “interests” by rejecting the notion that society
can be seen “as a patchwork of five or fifty cultural groups,” and
by believing instead that individuals are socialized to function within
“an elastic and crisscrossing web of multiple identifications.” She
adds, “If we accept this view as our meta-theoretical presupposition
for studying how people practice religion, we cannot take the con-
cept of a certain religious sub-culture with a clear-cut ideology and
sharp boundaries as our starting point.” No disrespect is meant when
the conclusion is reached that in delimiting her own perspective
Professor Popp-Baier has herself advocated the contextual-universalism
of the “clear-cut ideology and sharp boundaries” of an Enlightenment
ideological surround.

Enlightenment, Friends of the Truth, and the Problem of Violence

Underlying the contextual universalism of the Ideological Surround
Model are the somewhat non-empirical, normative, and sociological
presuppositions of a “certain religious sub-culture” known as the
Quakers or the Religious Society of Friends (Cooper, 1990). Quakerism
like the Enlightenment emerged historically out of the religious vio-
lence of 17th Century Europe. Critical in the development of the
Enlightenment was the Thirty Years War (1618–1648) when the
“intellectual debate between Protestant Reformers and their Counter-
Reformation opponents had collapsed, and there was no alternative
to the sword and the torch” (Toulmin, 1990, p. 17). Peace seemed to require “a vocabulary whose sense did not depend on prior agreement about the nature of God and the structures of cosmos and society ordained by him” (Stout, 1988, p. 161). A “vocabulary” of reason and science seemed to eliminate the need for such prior agreements and, thus, to promise peace.

Quakerism emerged more directly out of religious conflicts associated with the mid 17th Century English Civil War. To vastly but necessarily oversimplify, the Ideological Surround Model attempts to appropriately modify and extend potentials inherent within this religious subculture to contemporary circumstances. Three aspects of that legacy are most relevant to this discussion. First, Quakers were also known as Friends of the Truth. They, therefore, advocated a contextual-universalism that rejected relativism.¹

Second, like their Anabaptist “cousins” who also sometimes modify their arguments in attempting to speak to powerful contemporary “interests” (e.g., Yoder, 1984), Quakers were uncompromising pacifists. The American Quaker John Woolman, for example, advocated non-violence even in circumstances seeming to demand self-defense, “It requires great self-denial and resignation . . . to attain that state wherein we freely cease from fighting when wrongfully invaded” (Woolman, 1950/1774, p. 68).² He wrote these words in Philadelphia in 1757 during the French and Indian War when provocations for war were strong: “The calamities of war were now increasing; the frontier inhabitants of Pennsylvania were frequently surprised; some slain, and many taken captives by the Indians; . . . the corpse of one so slain was brought in a wagon, and taken through the streets of the city in his bloody garments, to alarm the people and to rouse them up to war” (Woolman, 1950/1774, p. 68).

¹ Of course, the contextual universalism of Quakers was Christian. The appellation “Friends of the Truth,” for example, was based upon the Quaker reading of John 15:15. Here, the attempt will be to present an “appropriately modified” analysis of the Ideological Surround Model that avoids a Christ-centered language that would be “unacceptable” to contemporary “interests.” This attempt in no way means that the ultimate ideological groundings of the model can be disconnected from such language or that some neutral Esperanto of rationality is available for eliminating the sometimes hidden ideological dimensions of argumentation.

² Actually, he said, “It requires great self-denial and resignation to God to attain that state wherein we freely cease from fighting when wrongfully invaded” (Woolman, 1774/1950, p. 68).
Finally, Quakers, like followers of the Enlightenment, developed “methods” that allowed them to “experimentally” address problems of conflict. These methods were not based upon a so-called “objective” rationality, but rather upon something that might be described as a dialogical empiricism brought under the mediation of Truth. This empiricism was not “value-free,” nor was it limited to “interests” that were “generally defensible as worthwhile.” In Woolman’s time, for instance, those who found slave-holding to be wholly indefensible did not refuse to consider the “interests” of those who held slaves. Instead, “interests” operating from different interpretations of Truth were brought together repeatedly across the years until greater “clearness” could be achieved about the Truth of this unacceptable social practice. Implied in these “Meetings for Clearness” was the assumption that you cannot have a “dialogue” with someone if you refuse to listen to their understanding of Truth because their “interests” are unacceptable to you.

Ideological Surround methodologies attempt to operate as Meetings for Clearness in which generally excluded “interests” are given a voice. Those who see Truth differently, according to their own contextual-universalism, are invited into dialogue. The task is to create opportunities for advocates of all ideologies to express their “interests” as “Truthfully” as they possibly can. The reliability and validity of social scientific methods have a potential to reassure advocates of conflicting ideologies that the processes of dialogue are appropriately mediated and will not easily put misleading words into their mouths. The Intolerance of Ambiguity Scale, for example, contains “misleading words,” not because religious believers are never “closed-minded” (for they certainly can be), but rather because “closed-mindedness” is not the only potential within the words of Faithful ideologies. The hermeneutics of generally excluded interests should be invited to use the reliable and valid empirical methodologies of the Enlightenment to deepen and broaden the understanding of all contextual universal conceptualizations of Truth, including those associated with the ideology of the Enlightenment.

Toward Truthful Tolerance of Ambiguity

Pacifist ideologies are never “pragmatic.” Advocates never assume “that their reasons . . . are universally convincing,” but rather that
they will generally seem foolish.\textsuperscript{3} And relative to the more powerful universalisms of history (e.g., Horsley, 2002), pacifist ideologies will be foolish, will constantly be dismissed as “unacceptable,” and should always be open to dialogical correction in appropriately mediated Meetings for Clearness. The “objective” Truth is that pacifist and all other ideologies operate as universalisms that betray the limitations of their own contexts. No ideology can ever be given an ultimate and universal justification because no ideology, including the ideology of Quakerism and of the Enlightenment, is Ultimate.\textsuperscript{4}

Professor Piedmont, for example, begins with an assumption that the purposes of the Intolerance of Ambiguity project were typical of cross-cultural psychology. “The objective of such cross-cultural research is to identify items in the new language that are correlated to those in the original language.” Then he adds, “The goal of this process is to create a scale that will, ideally, evidence factorial and mean level equivalence.” From this point of departure, he develops a wide array of very detailed complaints that criticize our work relative to his own reading of our project. In the end, he concludes that our effort has failed to conform to the somewhat non-empirical, normative, and sociological dimensions of a commitment to “rigorous empirical examination.” In other words, this project has failed to meet normative methodological standards that are one inheritance of the “Enlightenment legacy.” The task left unaccomplished by our study “is to determine to what extent one’s faith commitment is life enhancing and energizing versus being confining and defensive.”

The assumption of the Ideological Surround Model is that sometimes “rigorous empirical” Enlightenment methodologies can promote dialogue across perspectives that are in conflict (e.g., Ghorbani, Watson, Krauss, Bing, & Davison, 2004). But the further assumption is that this will not always be the case. Among other things, an invariant commitment to “measurement equivalence” means that the Enlightenment (or any other) ideology could use quantitative measurement to protect itself from the “dross” of cultural particularity. Within an Ideological Surround, the issue instead is to determine the extent to which one’s faith commitment is life enhancing AND defensive, and the life-enhancing and defensive elements of the Enlightenment should be examined as well. The contextual element of all contextual-universalisms, including the Enlightenment, will mean

\textsuperscript{3} One warrant for this assumption can be found in 1 Corinthians 1:23.

\textsuperscript{4} And for this claim, there is the warrant of Romans 3:23.
that they must always be at least somewhat defensive. The Ideological Surround Model assumes that cultural “dross” should not always be ignored. Once an ideologically defensive inattention to seemingly important cultural particularities can be documented empirically (which was the actual purpose of our project), then those with faith in “rigorous empirical examination” can engage in more Truthful applications of quantitative measurement methodologies.

Among other things, Professor Popp-Baier argues that the “dross” of Christian perspectivism will not be an interest “shared by all readers of . . . [our] article” and that what “is at stake . . . may be formulated along similar lines by feminists, post-colonists etc.” This is absolutely true, and within an Ideological Surround, the assumption would be that excluded voices—feminist, post-colonial, Muslim, gay and lesbian, fundamentalist, and their opponents too—should all use ideological surround methodologies to get their voices heard if prominent contemporary “interests” do not seem to find their “interests” to be “acceptable.” Moreover, the methodologies of the model can be used to critique Christian or any other “interests” that advocates of the Enlightenment might find to be “unacceptable.” For example, Christians sometimes dismiss the “interests” of “secular humanism” as “unacceptable.” Empirical translation schemes like those employed in the Intolerance of Ambiguity procedure, nevertheless, can challenge the Christian “disinterest” in such voices (Watson, Milliron, Morris, & Hood, 1995). The potential blindness of any ideologically motivated disinterest can be challenged.

At another time, Professor Popp-Baier argues that in addition to the “‘mainstream methodologies’ [of Professor Piedmont’s rigorous empiricism] we also have so-called interpretative approaches with methods like participant observation, phenomenological analyses, narrative analyses, conversation analyses, discourse analyses etc.” Any approach based upon the Ideological Surround Model is unnecessary because “these methodologies address the question of objectivity and discuss the different possibilities to achieve objective knowledge, not by eliminating subjectivity but by transcending subjective biases related to the different steps in the research process as much as possible.”

At least three comments deserve consideration here. First, the interpretative approach often seems to exist as an intellectual “ghetto” that too infrequently has its voice heard within an apparent “disinterest” in the “mainstream.” Perhaps, this claim is unfair, but it is a hypothesis capable of being tested. Do quantitative investigations typically condition their findings with sensitivity to qualitative insights? For example,
what percentage of citations in rigorous empirical investigations reference qualitative research? How many quantitative researchers regularly read and value the arguments of their interpretative colleagues? From the perspective of the Ideological Surround Model, the use of quantitative methods to make quantitative methods problematic might have advantages for those trying to promote qualitative methods within the mainstream.

Second, any attempt to achieve “objective knowledge . . . as much as possible” by “transcending subjective biases” may overestimate the possibilities of “objectivity” that are available to any form of contextual-universalism. The key phrase here is “as much as possible.” Will all or even most ideologies have a meaningful voice in how this so-called “transcendence” is achieved? This apparently will not be possible because many of these voices will be “unacceptable” or “uninteresting.” In short, the process of “transcending subjectivities” may be far less “objective” and Truthful than would be a struggle to achieve greater clearness by bringing together as many conflicting voices as possible in appropriately mediated dialogues.

Finally, an ideological commitment to “transcending subjective [so-called] biases” represents a “bias” that misunderstands the Ideological Surround Model. Within a Quaker ideological surround, the task is not to send Explorers of the Enlightenment out on expeditions to transcend or to colonize the rationality of other communities. Instead, the task is to adopt a generous hospitality that invites other subjectivities to speak. The hope is that all listeners and speakers in a dialogue can Truthfully discover their own “biases,” or rather can better understand the limitations that are necessarily associated with the contexts of their own and all other universalisms.

Concluding Foolishness

Within a pacifist ideological surround, a concluding emphasis should be placed on the problem of violence by returning to the at least implicit argument that only the rationality of the Enlightenment can “prevent” a clash of civilizations. As numerous commentators have emphasized (e.g., Tarnas, 1991) postmodern critiques of “rationality” have often emphasized the failure of the Enlightenment to not only solve the problem of violence, but to make it worse. The “vocabulary” of science and reason was supposed to eliminate the necessity of prior agreement about God as a way to achieve peace. This did not
happen. The bloodshed of the 20th Century was unprecedented. Rationality seemed to be much more effective in making the killing more technologically efficient than in “preventing” it. And in John Woolman’s time, people were roused to war by carting a body through streets of Philadelphia. Now, the media broadcast killings to billions all across the planet. In an Age of Smart Bombs, sometimes it can seem that the Enlightenment has been successful in increasing the intelligence of the weaponry, but not necessarily of the people.

For some, therefore, the bloodshed of the 20th Century was as important in falsifying the cultural domination of the Enlightenment in the West as was the Thirty Years War in doing the same thing for Christianity in the 17th Century. The notion that the Enlightenment can “prevent” a clash of civilizations will also be ideologically suspect for at least some in the sense that it is not possible to prevent what is already occurring. Within the context of this history, perhaps it will not seem totally foolish to question the ability of Enlightenment “objectivity” to overcome the contextualism of competing forms of universalism. This will seem especially true if and when the subjective assumption of the Enlightenment is that it is “not context-bound.”

From the perspective of pacifist ideology, civilizations almost always seem to be clashing somewhere, and this often seems to be the case because each is so committed to the “rationality” of its universalism that it fails to fully understand the limitations of its context. Improved methods of dialogue seem to be essential, and the Ideological Surround Model, whatever its limitations, seeks to encourage the development of such methodologies. Muslim voices, for example, have called for a dialogue rather than a clash among civilizations (see e.g., Ghorbani et al., 2004), and Ideological Surround perspectives can and have been articulated in a way that attempts to be generous and hospitable to Islamic beliefs (Watson & Ghorbani, 1998; Ghorbani & Watson, 2004).

Christian pacifist ideologies developed historically within the Roman Empire. At that time, heralds rode throughout the Empire to announce the “good news,” the “euangelion” of Roman victories that brought greater peace. Caesar Augustus was acclaimed as the Prince of Peace (Horsely, 2002; Walsh & Keesmaat, 2004). Pacifist rationality stood at the periphery of this Empire and had a very different vision of the Prince of Peace. This pacifist perspective did and usually still does seem foolish to others, and within the pragmatic rationalities of Empires, remains “uninteresting” unless and until it becomes a perceived threat or can be commandeered for some other purpose (Yoder, 1984).
From the foolish pacifist periphery, however, all rationality appears to be contextual. To some important degree, power constructs the realities of social life that then dictate the “pragmatic” efficiencies that “irrationally” define “rationality.” Speaking with a voice of the Enlightenment, Freud (1964/1933) once suggested that a “dictatorship of reason” will be necessary to prevent war. Within a pacifist ideological surround, all dictatorships deserve a hermeneutics of suspicion. Indeed, the Quaker assumption is that in response to the Empire of any Dictatorship of Reason, the task is to “speak Truth to power” (Cooper, 1990, p. 131).

References


ARTICLES
RELIGION, SOVEREIGNTY, NATURAL RIGHTS, AND THE CONSTITUENT ELEMENTS OF EXPERIENCE

Jordan B. Peterson

ABSTRACT

It is commonly held that the idea of natural rights originated with the ancient Greeks, and was given full form by more modern philosophers such as John Locke, who believed that natural rights were apprehensible primarily to reason. The problem with this broad position is threefold: first, it is predicated on the presumption that the idea of rights is modern, biologically speaking (only twenty three hundred years separates us from the Greeks, and three hundred from the English liberals); second, it makes it appear that reason and rights are integrally, even causally, linked; finally, it legitimizes debate about just what rights might be, even in their most fundamental essence. In consequence, the most cherished presumptions of the West remain castles in the air, historically and philosophically speaking. This perceived weakness of foundation makes societies grounded on conceptions of natural right vulnerable to criticism and attack in the most dangerous of manners. Most of the bloodiest battles and moral catastrophes of the twentieth century were a consequence of disagreement between groups of people who had different rationally-derived notions of what exactly constituted an inalienable right (“from each according to his ability, to each according to his need”). If natural rights are anything at all, therefore, they better be something more than mere rational constructions. The adoption of a much broader evolutionary/historical perspective with regards to the development of human individuality and society allows for the generation of a deep solution to this problem—one dependent on a transformation of ontology, much as moral vision. Such a solution grounds the concept of sovereignty and natural right back into the increasingly implicit and profoundly religious soil from which it originally emerged, and provides a rock-solid foundation for explicit Western claims for the innate dignity of man.

The Constituent Elements of Experience

Imagine for a moment that the human environment is not merely what is objectively extant in a given situation, present or past, or even across the broad span of some evolutionarily archetypal Pleistocene epoch (Cosmides & Tooby, 1987). Imagine, instead, something entirely different, paradigmatically different. Imagine that the human environment might be better considered “what is and has always been common to all domains of human experience, regardless of spatial
locale or temporal frame.” The environment, construed in such a manner, consists not of objects, but of phenomenological constants (although it still contains objects) (Peterson, 1999). These phenomenological constants constitute what does not have to be talked about when two or more people engage in a conversation—or even when one person attempts to understand himself.

All human beings are destined by the nature of their being, for example, to experience certain emotions: fear, anger, happiness, disgust, curiosity, surprise. The universality of these emotions makes them axiomatic: because they are experienced, they do not have to be explained. Their experience at a time and a place merely has to be stated, for mutual understanding to begin. A multiplicity of motivational states is constant, equally: lust, jealousy, envy, hunger, thirst, the wish for play, and the desire for power, to name a few. The raw fact of being is even more fundamentally axiomatic—but this being should not be confused with experience of the material world. The category of “material world” is too narrow and too precisely specified. The category of “material world” is a mere subset of the raw fact of being. The phenomenological world of being consists as much or more of environmental meaning, for example, as it does of environmental object.

Phenomenologically considered, all human beings have their existence in nature—but it is nature benevolent and nurturing and nature red in tooth and claw rather than nature as abstractly and objectively and distantly perceived. Thus construed, nature is the eternal susceptibility of the human organism to mortal vulnerability, physical limitation and psychological isolation, as well as the great realm of beauty and endless possibility that makes up the extended reaches of our being. This nature is paradoxical in meaning, intrinsically: simultaneously creative and destructive, as it offers both life and death; simultaneously immanent and transcendent (as what is nature can always be found at the extreme reaches of our conditional knowledge, no matter what that knowledge is of).

Phenomenologically considered, all human beings also have their existence in culture. We are social beings, axiomatically. Our being presupposes culture. Our period of dependence upon parental benevolence exceeds that of any other organism. The manner in which our nature is structured is inextricably associated with the process of enculturation that begins with our birth and that simultaneously
stretches back into the dim reaches of prehistoric time. This culture, phenomenologically speaking, is not a particular culture, but the fact of culture itself. Traces of previous civilization, embedded in the here and now, shape our very consciousness, molding it, granting it linguistic ability, providing it with a plethora of preformed concepts, artifacts and objects. Traces of previous civilization also constrain our consciousness, tyrannizing it, corrupting it, and limiting it, as one shape is forced upon us, rather than the many other shapes we might take.

Finally, phenomenologically considered, all human beings are individual. We have a subjective domain of being, privately experienced. Its nature can only be communicated in part. Our pain is therefore frequently only our own, and so are our joys. Our births and deaths are individual births and deaths. Whatever creative realm we might inhabit exists at least in part uniquely within us. Furthermore, we are self-conscious, so our individuality is apparent to us—and the fact of that appearance colors our experience ineradicably. Individual being is our greatest gift and our most appalling curse. As a gift, self-consciousness is conceived of as the very image of God reflected within us. As a curse, self-consciousness is unbearable knowledge of our own finitude, inadequacy, and tendency towards wrongdoing—conceived of, equally, as never-ending labor unto death.

The world as experienced therefore manifests itself naturally to understanding, action and conception, in three categories: nature, culture, individual; unknown, known, knower. Each of these categories appears to consciousness as a paradoxical and ambivalent unity, positive and negative (Peterson, 1999). It is the continual apprehension of this complex paradox that accounts for the central existential problems that universally characterize human existence—that accounts for the nature of our postlapsarian selves. Every individual is faced with the vagaries of the natural world, and everything that remains mysterious, within that world. Every individual is faced, equally, with the vagaries of the social world, and its often arbitrary and unreasonable demands. Finally, each individual is faced with the fact of his capacity for transcendence, restricted terribly by the limits of mortal vulnerability. Regardless of where the individual is situated in time or in space—regardless of nature or culture—these are his problems. His path of life is therefore necessarily characterized by comedy or tragedy, as he confronts the constituent elements
of experience, as he solves or fails to solve the essential problems of life. It is for such reasons that the nature of human experience manifests itself to conscious apprehension as a story.

This is the world naturally apprehensible to a biological mind, an evolutionarily-constructed mind, the mind of a highly social creature, with a constant family structure: the primary or base-level category of mother, part of our ancient mammalian heritage, broadened with the help of our more powerful cortex to encapsulate the natural world itself; the primary category of father, broadened in the same manner to include the entire patriarchal social structure characteristic of our species; and the primary category of self, broadened to include the individual, as such, struggling endlessly with the primordial forces of nature and culture.

This is the world that makes up religious reality, as well—phenomenological description, eternal content, dramatic form: representation of nature, creative and destructive, the matrix from which all things emerge and to which all things eventually return; culture, tyrannical and protective, capable both of engendering a tremendous expansion of individual consciousness and power and of simultaneously subjecting everything natural and individual to a catastrophically procrustean limitation; and the individual, ennobled by the possession of private being and crushed by its terrible weight, torn by gratitude and resentment into motivation for ultimate good and unspeakable evil. This is by no means the same realm over which science spreads its unshakeable dominion.

Something is still missing, however, from this description, necessarily complete though it may appear. Three elements make a group—and the group is, in this case, the fourth element. The Totality of the constituent elements of experience—Nature, Culture, Individual; Mother, Father, Son—comprises a fourth element, the indescribable Absolute, out of which the separate elements emerge. This Totality is YHWH, the Old Testament Hebrew God, whose name cannot be uttered, who must not be represented, and for whom no representation is sufficient. This Totality is the Uncarved Block of the Taoists, the Mother of the ten thousand things, or the paradoxical initial union of Tiamat and Apsu, the primordial parents of the Mesopotamian elder Gods. Such concepts of the Divine all exist as finally inadequate representations of a primordial but undifferentiated unity, an infinite plurality of potential (but no defined actuality), an
eternal realm somehow predating, postdating and encapsulating being as experienced. This is the chaos, the *tehom*, the *tohu-bohu* out of which reality emerged, emerges and in the future will still emerge. In some sense, it is not a category of being at all—not even being itself—but the formless, out of which category and being themselves emerge. Despite this, its description (insufficient by definition) must be attempted, to render the religious story complete.

The Totality can be and has been commonly conceptualized as a winged serpent, the *Dragon of Chaos* (Peterson, 1999). It is a strange and monstrous concatenation of paradoxical features. It is earth and heaven, the source of matter and spirit (psyche). It partakes of the earth, and of matter, because it is a creature close to the ground, primordial, serpentine (see Ohman & Mineka, 2003). It partakes of spirit, associated with aerial being, because of its bird-like nature, its wings. It can shed its skin, and be reborn. It is in constant flux, characterized permanently by the capacity for transformation and rebirth, despite its eternality and agelessness. It is the primordial element.

How can such a representation, such a manifestation, be differentiated and understood? First, and most evident, is its absolute nature. It is a totality in time as well as space. Whatever it is, in itself, exists only in relationship to itself. It has no need of anything outside of it. It nourishes itself. There is nothing outside of it, by definition. Where it exists, there is no outside, and no inside, either. It is the Alpha and the Omega, the beginning and the end. It is not something constructed, and then experienced—any more than the more comprehensible and differentiated elements of experience are constructed, and then experienced. Instead, it manifests itself directly to perception, in the guise of all things frightening, unexpected, and rife with potential. It is the anomaly out of which the differentiated world emerges. It is what is not expected, before it is understood. It is what has not yet been encountered and classified. It can be considered most productively in relationship to natural structure, and social structure, and the individual, as the ultimate source of those things. It is, finally, the chaos that is even more primordial than the simple unknown.

Religion as drama and literature portrays these domains of experience, differentiated and absolute, as characters, as eternal characters—as deities, really—granting them status not only as objects as modern people might conceive of objects but also as an admixture of objective
feature and motivational and emotional relevance. This means that everything contained within these domains has implication for action built into the nature of its being (and that the scientist arbitrarily although usefully eradicates this aspect of being from his purview when he reduces a phenomenon to its objective features). It is the characterological nature of the great domains of experience that make human experience a play, as conceived of by Shakespeare (1599/1952, p. 608)—a forum of action, and not a mere place of things. It is the world as dramatic play that is described by our great religious and literary stories: All the world’s a stage, And all the men and women merely players: They have their exits and their entrances; And one man in his time plays many parts.

Morality: Tradition and Transformation

If this is the world, then, how is it that people should act in it? How should the proper relationship between the individual and all the constituent elements of experience be conceptualized? What is the proper response of the individual, given that he is threatened by the natural world and the unknown on the left hand, and by social order and its tyranny on the right—but is also dependent on the natural world and chaos for all good things and all new information, and on the social order for a successful mode of being? How can such a route be properly negotiated? Is there anything constant and general that might be said in answer to such a question?

It is precisely the mythology of the hero, in its multiplicity of forms, which addresses this problem. Carl Jung, who provided what has perhaps been the most complete analysis of such mythology, believed that what the hero encountered was the unconscious itself (Jung, 1911/1967). Jung’s “encounter with the unconscious,” however, seems a specific and limited manifestation of a more general class of conceptions and behaviors (just as Freud’s Oedipal drama was a specific and limited manifestation). What the hero actually encounters, at the most inclusive level of analysis, are the constituent elements of experience: unknown, known and knower; nature, culture and individual. What is unconscious is a subset of what is unknown, but the unknown exists independently of the merely unconscious (Peterson, 1999) (even though it may be met, first, by the unconscious). It is confrontation with the unknown, as such, that is
most simply and evidently heroic. Equally, however, although somewhat more subtly, the hero also restructures what is known, widening the purview of culture or challenging and reconceptualizing its most fundamental axioms. Finally, no hero remains unchanged, as a consequence of such activity. He necessarily meets himself as an individual, defined in contrast to what he confronts and restructures, broadened and extended as a consequence of the information so garnered and conceptualized.

The story of the hero is the most basic of plots, therefore, because it deals with the most basic of encounters. The plot is immediately understandable, at least in its more specific manifestations, to everyone capable of becoming captivated by a story. There are romantic variations, and adventure story variations. Sometimes the hero meets an unfortunate end, and fails. This is a tragic story. Sometimes he or she prevails. This is a comic story. The first two basic elements of the plot can be summarized in the following manner: (1) A current state of being prevails. This can be a psychological state, such as a personality. It can be the state of a family, or an extended social group—a town, a city, a country, the entire global community, even the eco-system itself. (1) The integrity of this state of being is threatened. Anything dangerous, unpredictable and unexpected—anything novel or anomalous—can serve as an appropriate threat. It might be a stranger—a person or group from another culture, an alien in a science-fiction thriller, a terrible monster that lives in the deep (dominated and oppressed, but nonetheless capable of re-emerging), or an agent of pure horror. It might be an object that moves, of its own accord, or the improperly buried dead in the basement. It can be anything fear-inspiring, anything reptilian, anything that smothers, or entrances, or seduces. It can be a strange idea, just as easily—a new ideological or religious movement, a political revolution. It is anything that can change, portrayed in some metaphorical representation. It is, in the final analysis, chaos itself that threatens the stable state.

This means, in passing, that the apocalypse is always happening. Chaos is an eternal constituent element of experience. In consequence, the End of the World is always nigh. What is presumed now, what is thought now, what is valued now is not good enough for the next second. Induction is scandalously unreliable. It is in part for such reasons that apocalyptic images are interspersed throughout the New Testament (Matthew 24:15–21): When therefore you shall see the abomination
of desolation, which was spoken of by Daniel the prophet . . . standing in the holy place . . . then they that are in Judea, let them flee to the mountains: and he that is on the housetop, let him not come down to take any thing out of his house . . . and woe to them that are with child and that give suck in those days . . . for there shall be then great tribulation, such as hath not been from the beginning of the world until now . . . Change is necessary, because change is coming. Change means “let go of what you know,” or perish. That is, of course, the apocalypse, and it is always upon us. Structure is eternally threatened. This is an existential problem. How can this be dealt with, when it is structure that provides necessary security?

The individual threatened by chaos can merely refuse to look, can step away, and avoid. Such refusal is as simple as “not doing.” This is not active repression, full processing followed by effortful forgetting. Not doing, not attending, is instead the default position (Peterson, 1999)—a sin of omission, not commission. The brain circuits that mediate fear do not respond so well to omission and avoidance, however. They are hard-wired and single-minded, and they scan the environment for everything unknown and threatening (Gray & McNaughton, 2003). They facilitate alertness and preparation for action. Because their job is so important, they cannot be fooled. The un-act of avoiding, much like the act of running away, is definition as much as behavior. If it cannot even be looked at, if it must be made distant, then it must be more dangerous than everything else, previously encountered and mastered. To avoid, to run away, is therefore to label the threat unmanageable, de facto, and the self unworthy. Once a threat, minor in its first manifestation, has been amplified in importance by the act of avoidance, it becomes increasingly able to elicit outright panic. It is in this manner that small problems transform themselves into disasters.

Our perceptions fool us into thinking that everything is separate. Everything is connected, however, and one damned thing inevitably

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1 Daniel’s “abomination of desolation” (Daniel 12:11) is a false idol. This means an inappropriate highest value (“from each according to his ability, to each according to his need . . .”). Such idols disintegrate suddenly, and leave chaos in their wake. Daniel famously interpreted King Nebuchadnezzar’s dream, featuring a colossal metal statue, with feet of clay. A small stone “cut out without hands” strikes the statue, breaking it into pieces. In Matthew, Christ likens this to the destruction of the temple, construing this as a precursor both to Noah’s flood and the consequent appearance of the Son of Man (the proper value)—to the elect.
leads to another. When anything is ignored or avoided, the facts of its myriad associations with the surrounding world starts to inexorably manifest themself. It is for such reasons that Mircea Eliade, the great historian of religions, can state (1978, pp. 62–63): “As has been well known since the compilations made by R. Andree, H. Usener, and J. G. Frazer, the deluge myth is almost universally disseminated; it is documented in all the continents (although very rarely in Africa) and on various cultural levels. A certain number of variants seem to be the result of dissemination, first from Mesopotamia and then from India. It is equally possible that one or several diluvial catastrophes gave rise to fabulous narratives. But it would be risky to explain so widespread a myth by phenomena of which no geological traces have been found. The majority of the flood myths seem in some sense to form part of the cosmic rhythm: the old world, peopled by a fallen humanity, is submerged under the waters, and some time later a new world emerges from the aquatic ‘chaos.’ In a large number of variants, the flood is the result of the sins (or ritual faults) of human beings: sometimes it results simply from the wish of a divine being to put an end to mankind . . . the chief causes lie at once in the sins of men and the decrepitude of the world. By the mere fact that it exists—that is, that it lives and produces—the cosmos gradually deteriorates and ends by falling into decay. This is the reason why it has to be recreated. In other words, the flood realizes . . . the ‘end of the world,’ and the end of a sinful humanity in order to make a new creation possible.” What is the connection between anomaly, neglect, avoidance and the flood? Eliade clarifies the literary or dramatic description of something inexorably associated with the second law of thermodynamics: Things fall apart. He does not end with that observation, however—and neither do the myths of destruction he is describing. Things fall apart, of their own accord, but the rate at which they do can be accelerated by willful blindness on the part of the individuals involved with those things. A culture still scandalized by the recent catastrophic flooding in New Orleans—caused as much by willful human blindness and corruption as by any “act of God”—might have renewed reason to understand a very old story.

The mythological hero does not ignore what is right in front of his face. But what is right in front of his face? The hero says, “The walls are in danger of being breached. Something is lurking outside. We must deal with it, and deal with it now.” This of course makes
him very unpopular, particularly if he is the first to ring the warning bell. The hero states, “What we are all doing right now, thinking right now, presuming right now, is no longer working!”—and all the people who particularly benefit from what is being done right now find themselves outraged. It is for this reason that the redemptive hero is always contaminated with chaos. It is for this reason that the redemptive hero always stands for the unredeemed and oppressed. It is for this reason that people do not really like heroes, and why they do not necessarily appreciate wise and creative people. The hero says, “Excuse me, but the little box you live in is missing these important things, and if you do not pay attention, you are going to soon encounter events you will not appreciate.” The people he addresses, good citizens, blinded by satisfaction and pride, think, “if that person would just shut up and go away, then there would be no reason to concern ourselves with such catastrophe”—and, in truth, there is no shortage of false prophets of doom. Such a response is therefore eminently understandable. However, the dragon of chaos is not so easily mocked.

All of the persons within the walls of the social castle (see Figure 1) are secure, and they all know what to do, as long as they remain there. Those walls narrow their existence, of course, but offer security and the ease of partial blindness. There is no outside, in the castle, only inside, and everyone knows exactly where the walls are. But the castle walls are always crumbling, and the outside is always trying to claw its way in. Outside—and there is always an outside—lies the dragon. Some great ancestral hero holed it up in its bottomless cave a thousand years ago, but it did not die. It cannot die, because there is always something that remains to be mastered, differentiated and understood. So it dug its way out, patiently, for all those centuries, thrust its ugly beak up through the soil, and returned to threaten the castle. If the hero is helped to flourish, however—or even let well-enough alone—he will leave the protective walls that surround his community, confront the dragon, rebuild the community, and keep the flood at bay.

The dragon, the unknown itself, is matter and spirit, before they are differentiated—while they are still “married,” or conjoined in one (Jung, 1944/1968). It was Jung’s unrivalled capacity for symbolic interpretation that revealed the meaning of this idea, and it was perhaps the most profound discovery he ever made. The developmental psychologist Piaget said, of the child: he constructs him-
Figure 1: St. George and the Dragon: The constituent elements of experience, in dramatic action

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self out of the consequences of his own exploration: “knowledge does not begin in the I, and it does not begin in the object; it begins in the interactions. . . . There is a reciprocal and simultaneous construction of the subject on the one hand, and the object on the other” (cited in Evans, 1973, p. 126). This constructivist observation sheds light on the meaning of Jung’s strange claim (although the Piagetian and the Jungian observations were causally unrelated). The personality has to come from somewhere. Jung’s genius placed that somewhere in the unknown, as such—the prima materia.

The unknown world is a matrix of information, prior to its separation into world and psyche. It is by no means a simple place of pre-existing objects, there for the perceiving (Peterson & Flanders, 2002). The boundaries between things and the categories use to order them are not given, and are defined and established with much difficulty. The child explores the matrix, the unknown, extracting some of the information it consists of, parsing some segment of it into the world of material objects, and some into the world of spirit, personality, and subjective being. Through contact with the unknown, therefore, the child creates himself and the world. This is no mere metaphor. There are many physicists working today (John Wheeler (1980) foremost among them) who are convinced that the world is made up of information, at the most primary level, and that “matter” is a secondary manifestation—dependent for its existence in some uncanny manner on the act of observation. Out of the unknown, through exploration, springs reality: it is in this manner, through “incestuous” union with the hero, that the dragon of chaos gives birth to the world.

If an individual is to mature, he must learn to tolerate the unknown—the terrible figures of imagination that inhabit it, and its real dangers. He might just as well get over it sooner, rather than later, and voluntarily, rather than involuntarily. If he cannot or will not understand this, then he cannot be a hero. He will then go through life terrified or dependent—maybe on another hero, maybe on an ideology (which is just another crumbling castle, built out of words). St. George, mythological redeemer, emerges voluntarily from his dogmatic slumber, and confronts what lurks outside. The lair of the dragon, deep in the underworld, is surrounded by the skulls and the bones of his previous victims—unsuccessful challengers and travelers caught unaware. The threat it poses is real. In consequence, it is no wonder that people cower inside their castles and never venture outside.
St. George journeys outside the walls, voluntarily—it has to be voluntarily—and he defeats the dragon. In doing so, he frees a woman, a virgin. Dragons, as is well known, have a peculiar weak spot for virgins, and they also tend to hoard gold. Unlikely as the dragon is, these are two tendencies that are so non-reptilian that they could not possibly have been predicted. Perhaps it is, most concretely, that the exploratory hero makes himself attractive to the watchful maiden. Perhaps it is, more abstractly, that the hero discovers his anima, his soul, his inspiration, when he dares to confront what he does not yet understand. Perhaps it is, most generally, that the treasure beyond price is always to be found where everyone least wants to look. In sterquiliniis invenitur, according to Jung (1956/1976, p. 35). In threat lies opportunity. In the unknown lies possibility. Among the oppressed, lies salvation.

In the process of psychotherapy, which Jung identified with supreme moral effort, the client first has to determine where he is going, if he is going anywhere. If the client is not going anywhere, that is his first problem. He is enmeshed in chaos, with no direction. He has to determine what the good life would be, in principle, before doing anything else. What might health, in its most ideal sense, mean—even hypothetically? If he is in fact headed somewhere, but is stuck, fear is a likely causal agent. Just a glimpse of the Medusa can paralyze. The good therapist tries to determine what his client is afraid of—afraid of in the past, the present, and the future. Once he identifies the source of such fear (and resentment, and hostility, and anger, and pain), then he helps the client chop it into little, manageable pieces, bringing active approach to the problem, and clarity to the representation.

The psychotherapist says—and acts out, if he is a good therapist, “Look at this! Look, carefully, at all these terrible things!” The client thinks, “I have never looked at that, and I am certainly not going to start now.” Then the therapist offers him just a little piece of the terrible things, and the client looks at that little piece, and he discovers something very surprising. He can look! He thinks, “That is so interesting. I always believed that I had to hide, and here it turns out that hiding is unnecessary! There must be more to me than meets the eye! This is absolutely a terrible thing I am looking at, yet I can do it!” So he looks, and he tears the thing apart with his teeth, and swallows it, and he gets a little bigger, and as he gets bigger, he tears into larger pieces of the terrible monster, and then
he finds he is no longer so afraid of things. It is not that he “habituates” to the “feared stimulus,” as the behaviorists had it. It is that part of the information he derives from his encounter with the terrible unknown is the knowledge that he can survive, if he does not run away—and that he may even thrive. Man is built to lift impossible loads, and to digest indigestible things. Man is built for weight—but he cannot discover his strength without Shouldering his cross.

The hero separates himself, voluntarily, from the decayed remnants of his tradition, admits to the existence of the terrible unknown, and determines to face it. He defeats the dragon, encounters romance and adventure, and finds the treasure hoarded by the monster. There the story ends—or does it? This is all excitement, without responsibility, so it cannot be enough. Adventure without responsibility is impulsive and mindless and finally destructive. The full hero cycle therefore necessarily involves return to the community. The hero has to bring back what he has discovered, and rediscover, repair and restore the tradition from which he has sprung. He garners new information, as a consequence of his voluntary encounter with the unknown, and that is genuinely redemptive, in his individual case. However, there can be no sufficient individual redemption in a world still characterized by suffering. There can be no empathy or love in such redemption. In consequence, the hero must journey home, even if he has to abandon paradise to do so. The pre-existing structure, insufficient as it is, must be rebuilt—sometimes on a new foundation. In this manner the new information finds its permanent integration, and serves the cause of universal salvation. It is also for this reason, however, that the hero, unwelcome originally as the bearer of bad news, may be equally unwelcome as returning victor. He returns to the community necessarily contaminated by his adventure. He cannot help but bring back what he has won. He is half dragon. He returns as someone whose mode of being and manner of speech now screams out the necessity of change. He is therefore frightening to those who remained safely ensconced within the castle walls.

The hero has transcended some culturally-imposed limitation. The fact that culture limits, however, does not mean that it is without merit. This is the modern error. Without culture nothing exists but

2 Williams, Kinney & Falbo (1989) note, for example, that the cured agoraphobic remains frightened, but now regards him or herself as capable of mastering the feared situation.
chaos and conflict. The hero and culture, the great father, must therefore exist in a very precarious relationship. Tradition limits the hero, by putting restraints on his domain of action. In a totalitarian state, for example—tradition taken to its logical conclusion—no individual behavioral or conceptual variability is allowed. The cowards who huddle within the thick walls of the totalitarian state want absolute predictability, even among those they huddle with, because the existence of the unpredictable and unknowable poses precisely the problem they most want to avoid. The application of such structures kills creativity, of course, and allows the gap between social preconceptions and the real world to continually expand. The hero is the necessary antidote to such sterility and anachronism. His eyes are open, and he retains voluntary contact with the unknown. However, he is also the enemy of tradition. He demonstrates its limits and, therefore, undermines its structure. Despite this, without tradition, he is homeless and lost. Some form of entente must therefore be established.

Friedrich Nietzsche was very much aware of the complexity of this problem, and he solved it, partially (although its solution had been generated in more implicit mythological or literary form centuries before). He proposed that slavery was a necessary precondition to freedom. This is a message that is very much unacceptable to modern people, who believe that discipline and creativity are opposing forces. “What is essential in heaven and on earth,” Nietzsche said (1885/1966, pp. 100–102), “seems to be . . . that there should be obedience over a long period of time and in a single direction: given that, something always develops, and has developed, for whose sake it is worth while to live on earth; for example, virtue, art, music, dance, reason, spirituality—something transfiguring, subtle, mad, and divine.” Acculturation, in Nietzsche’s view, is a necessary prerequisite to transcendence. The great father engenders the hero (and disciplines and stifles him, equally). It is easy to despise adolescents because they strive above all to fit in—but they should fit in, they should learn to be like everybody else, because the inability to do so is failure. Perhaps the development of the individual should not end with adaptation to the group, but such adaptation is at least a necessary stage of transition (as well as a stage that many never attain, let alone surpass). Fortunately, there is a withholding clause built into the contract of adolescent acculturation. Those who take advantage of it can escape from total assimilation.
Consider “The Grand Inquisitor” from Dostoevsky’s *The Brothers Karamazov* (1880/1981), (8). Christ returns to Earth in Seville, Spain, at the height of the Inquisition. He wanders around, healing people, performing miracles, and generally causing havoc and confusion. The Grand Inquisitor, head of the Spanish Catholic Church, promptly has Him arrested for sedition and heresy. He locks Him up, and has Him sentenced to death. In prison, the night of the arrest, the Inquisitor confronts Christ. He tells Him that He is no longer welcome—if He ever had been. The Catholic Church is now properly ordered after centuries of effort. It has been made smoothly functional, and accessible to the common man. Anything truly mystical, anything genuinely transcendental, is only likely to cause trouble. For these reasons, Christ’s death is once again necessary. Christ listens in silence. After the Inquisitor finishes justifying his actions, He kisses him on the lips. The Inquisitor pales, and trembles, and banishes Christ through the partially open door. This story demonstrates clearly that Dostoevsky was no simple ideologue. He knew that submission to the rigors of arbitrary tradition was a terrible thing. In the final analysis, however, a tradition that is not entirely corrupt still shelters, still educates, and still leaves a door open for the hero. In a society that is functional, there is a necessary tension between innovation and update and tradition and security, and one cannot be mindlessly sacrificed to the other. If you are careful, and disciplined, you can breach the wall—but every fanatic and deviant cannot be allowed to run amok and break every rule, merely to demonstrate his “freedom.” “All impulse, no responsibility” is the slogan of the criminal and the psychopath, not the redemptive hero.

The attitude of the benevolent father is, therefore, “do what I say—but be your own man.” This is paradoxical, by necessity, and may even seem hypocritical. The world is a paradoxical place, however, existentially speaking—phenomenologically speaking—and it is far from clear that it can be mastered without an equally paradoxical attitude or system of belief. It takes something of the order of ten thousand hours of practice to master a discipline, and the rules of a discipline cannot be creatively transcended before such mastery.

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3 As Dostoevsky says, in Notes from Underground (1864/1961): “one may say anything about the history of the world—anything that might enter the most disordered imagination. The only thing one can’t say is that it’s rational. The very word sticks in one’s throat.”
is obtained. Someone who practices ten thousand hours, some virtuoso, has therefore become a slave to his instrument, sacrificing momentary impulse, social life, relationships, career opportunities—but he may come out at the other end with a wild and turbulent freedom. Everything he needs has now been automatized (see Swanson, 2000). He sits atop a very complex and sophisticated machine, deeply embodied skills at the ready. None of that happens without discipline. So Nietzsche (1885/1966, pp. 100–102) says, “the long unfreedom of the spirit, the mistrustful constraint in the communicability of thoughts, the discipline thinkers imposed on themselves to think within the directions laid down by a church or court, or under Aristotelian presuppositions, the long spiritual will to interpret all events under a Christian schema and to rediscover and justify the Christian god in every accident—all this, however forced, capricious, hard, gruesome, and antirational, has shown itself to be the means through which the European spirit has been trained to strength, ruthless curiosity, and subtle mobility, though admittedly in the process an irreplaceable amount of strength and spirit had to be crushed, stifled, and ruined.”

The West had a morality, Nietzsche said—Judeo-Christian morality. For a long time we thought that such morality was the world. It was not so much a matter of belief, as appearance: the cosmos appeared as intrinsically Christian (just as it now appears intrinsically Newtonian). But then we journeyed to all corners of the world and discovered that people think a hundred or a thousand different ways—and that it was far from clear that we were right and they were wrong. But here, we have this morality—we put a lot of work into it, and we can not just throw it away. Out of such casual abandonment rises the nightmare of Hobbes. What must we do? And Nietzsche thought, “slavery . . . we do not like the notion of slavery, and we have our reasons for that. But maybe it is a developmental necessity, the precondition for freedom, particularly if it is adopted voluntarily. Maybe the individual has to adopt a framework, an arbitrary framework—a game, if you like—and become an expert player. Maybe, having mastered one game, he can play many games, and become in turn a master of games, rather than merely a player.” The Great Father educates and tyrannizes his son who, in turn, betrays and enlightens him. The son looks past the father, to the mother of all things. He derives new being from her. His contact with her ensures his maturation. His consequent return to the father
revivifies tradition, and completes his journey. In this manner, society maintains itself, transcends itself, re-encounters the ground of being, and grows.

*Mesopotamia and the Enuma elish: Marduk, Tiamat and the genesis of Genesis*

The Priestly creation story initiating Genesis concerns itself with the origin of being. This is not precisely the same concern that occupies modern cosmologists. Modern cosmologists tend to concern themselves with the origin of the material world, and the time and space within which that world manifests itself, and believe that the problem of human experience is somehow nested secondarily within that broader domain of concern. The authors of Genesis, however, did not automatically draw a distinction between the subjective and objective aspects of being, and also did not assume that the subjective was necessarily a subset of the objective. Such distinctions and claims were not made, formally—could not be made—until the dawn of the scientific age. The measurement instruments and technologies necessary to separate the subjective and objective had not been invented. More importantly, the philosophical work needed to even begin such a separation had not been done. Science emerged a mere four hundred years ago, and then only in one place, in Europe. The sophisticated ancient cultures of Egypt, India, China, Rome, Greece and Meso-America existed in the absence of science, although they did develop some technologies. This all means that the authors of Genesis did not conceive of being in the same way that scientists do. They thought of experience as being. They thought phenomenologically. This does not mean in any way that they were naïve.

The first creation story in Genesis is, of course, a myth. Myth is a form of knowledge that is predicated on presumptions that are neither scientific nor empirical and that is dramatic and narrative in structure. The most profound myths describe states of being or transformation that exist eternally, in some sense. These states of being should not be confused with material reality. The authors of Genesis, with their innate phenomenology, were trying to account for the emergence of experience, including all the subjective aspects of experience, rather than the emergence of world, in some objective sense. In the opening lines of Genesis, God generates order from
chaos. Order is the habitable cosmos, while chaos is conceived as some pre-extant but formless matter. The idea that order emerged out of chaos sprang from a deep but inchoate understanding of the fact that all human environments were characterized by two invariants (ignoring the fact of the active observer, for the moment). All places and times that can be experienced are composed of things that have been given comprehensible form and structure, and that have been rendered predictable and reliable and habitable. All places and times that can be experienced, likewise, also still contain things that are unknown, dangerous, mysterious, and unexplored—and formless and chaotic and “pre-existent” for precisely those reasons.

The idea that being itself is a consequence of the interplay between chaos and order is one of the most fundamental mythological ideas. The most striking example of this idea can perhaps be found among the Taoists, who conceive of “the environment” at the most general level of abstraction possible. Tao—which is reality, phenomenologically considered—is the eternal and intrinsically meaningful co-existence and dynamic interaction of yin and yang, feminine and masculine, nature and culture. Lao-Tzu (Rosenthal, 1984b) describes this invariant and lowest-resolution environment in the following terms: All things are microcosms of the Tao; the world a micro-cosmic universe; the nation a microcosm of the world, the village a microcosmic nation; the family a village in microcosmic view, and the body a microcosm of one’s own family; from single cell to galaxy.

There are two structural elements described in the first chapter in Genesis (“chaos,” and “heavens and the earth”), one process (“creation”), and one actor (“God” or the “Word of God”), engaged in the process. The first structural element, chaos, is signified by tehom, for “chaos”; by tohu, for “waste,” or for “matter without substance”; and by “vabohu,” for “emptiness” or “confusion.” These three words—tehom, tohu and vabohu—are very interesting, for a variety of reasons, and profitably bear further investigation. The Canadian Rabbi Itzchak Marmorstein (2005), who has begun to explain the Torah one word at a time, describes tehom as “the unfathomable, undifferentiated womb out of which existence, as we experience it, emerges. All potential exists in this primordial energy, or state. Metaphorically, it is a confused, seething mass; the abyss, the deep, and the surging bel lowing of the waves.” Tohu, similarly, is “a chaotic condition, or place without color or form—or, more specifically, something that seems for a moment to have form, but when looked at again, loses
that form. *Tohu* is the subjective effect of chaos; the force that confounds people, and causes them to have misleading visions,” which is a definition that is very psychological in nature. *Vabohu*, finally, is related to *tohu*, but means more specifically “the indistinct, entangled, confused mass that all forms once were, prior to their division into separate kinds of objects.”

The “heavens and the earth”—*hashamayim* and *ha’aretz*—comprise the vast and spiritually stunning spaces that rise above us as well as the material domain that makes up our physical being and the physical being of those things we experience. This material domain is both a trap in which our consciousnesses are caught and the *a priori* precondition for individual existence in its destructive and vulnerable but potentially redemptive aspects. The creation narrative in Genesis has deeply embedded within it the idea that the materiality of the world clothes partial beings, incomplete avatars of God, whose purpose is the continuation and potential perfection of the incompletely manifest being characterizing the original creation.

The process, creation, is characterized by the second word in Genesis, “*bara*.” According to the Kabbalist Adin Steinsaltz (1985, p. 36), the creation represented by *bara* “is not the coming into existence of something new, but the transmutation of a divine and illimitable reality into something defined and delimited,” particularized and actualized. This analysis of *bara* seems very illuminating first because it attributes genuinely creative power to consciousness and cognition (creative, though limiting), and second because it seems so closely related to the Christian idea of the *Logos*. *Logos*, one of the most remarkable of all the ancient philosophical or theological conceptions, is a word with an extraordinarily broad range of meaning. It means everything our modern word *consciousness* means and more. It means mind, and the creative actions of mind: exploration, discovery, reconceptualization, reason and speech. *Logos* is, further, something whose relationship to the mere material is so fundamental that the material does not really exist at all in its absence. Finally, it is something whose workings are essentially redemptive, continuing and perfecting the process of creation. It is generally transcribed, in the Christian tradition, as the Word, and is closely identified with the transcendental being of Christ, as well as with the original creative force of God. This is a very peculiar identification, from the perspective of strict temporal logic, because it is the Word of God
that creates order out of chaos—and that Word is a phenomenon that predates the birth of Christ, from the temporal perspective.

The fundamental story of the first part of Genesis is predicated on the assumption that chaos can be conceptualized as a matrix, as something with a metaphorically female aspect. A matrix is a substrate from which structures may emerge—something that can “give birth” to structure. It is the encounter with chaos of Logos that brings habitable order, the “heavens and the earth” into being. Logos—the Word of God, a phenomenon associated with speech, and communication, and logic; logos: logic, rationality, courage, exploration, all combined into a single entity or trait. The idea behind Genesis is that the background of experience—the matrix, chaos—cannot be conceptualized as real in the absence of the seminal ideas and piercing glance of consciousness. It takes the interplay between the feminine principle, chaos, and the masculine principle, logos, to produce being. Immediately after the establishment of livable order in Genesis, the deity Elohim identifies the individual human being with logos—man and woman are “made in God’s image.” The image of God is therefore considered the essential characteristic of the human being. What that means, by all appearance is that logos or bara also operates in human beings. The implication is that our everyday capacity to make order out of chaos (and sometimes the reverse), is identical to the principle that gives rise to the cosmos. The individual logos therefore partakes of the essence of the deity in a very direct sense, insofar as being itself is dependent on the operation of that logos. This implies that there is something genuinely divine about the individual—at least insofar as the existence of being itself might be regarded as divine.

How are such ideas to be understood? Where did they come from? How did they emerge, in all their mysterious profundity? How could such a daring and radical hypothesis have possibly been formed? Part of the answer to these questions is that the stories in Genesis are not mere stories. They are instead the mysteriously encapsulated representations of untold centuries of behavioral and conceptual experience. They are instead the inexplicable manner in which the wisdom of the human past compresses itself into linguistic form, unconsciously grasps the attention of the living, and continually serves as a source of security and inspiration. We are fortunate enough to know something of this past, however, in the form of the extant remnants of
the myths and practices that predated and informed Genesis. Because of that, we can see and come to understand something of the developmental process that led to its emergence. The *Enuma elish*, for example—the Mesopotamian creation story—substantively predates the Judeo-Christian Genesis account, was formulated over hundreds or thousands of years in the same geographical area, and constituted part of the general culture of the people who inhabited that area.

The *Enuma elish* (see Heidel, 1965) begins with the description, once again, of two fundamental characters—two constituent elements of a reality so universal that it transcends the merely proximal reality of current being. The first of these characters is a reptilian or fishlike or serpentine female character, who inhabits the unimaginable depths of the watery “primary element.” This primary element is both like our modern water, in that it serves as the birthplace of life, and something more fundamental, in that it serves as the mother of all things. This character is Tiamat, the dragon of chaos and, equally, the primordial ocean. Tiamat has a husband, Apsu, the begetter, whose nature and character are not subject to much development within the confines of the *Enuma elish*, but who can be recognized rapidly as the male consort of chaos, traditionally representative of order, limited and structured. These two characters represent the fundamental aspects of being in much the same way as the Taoist yin and yang represent the primal totality. The first of these aspects is the formless chaos that is all potential but no actuality, represented by Tiamat. The second, represented by Apsu, is the order whose imposition onto chaos or combination with chaos is necessary for limited form to arise. The Mesopotamians regarded Tiamat and Apsu as locked together in a sexual embrace, in the incomprehensi—

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4 It is very important to remember that our modern category of “water,” despiritualized and high-resolution, excludes many phenomena or qualities that were more automatically perceived as similar or even identical by the pre-scientific mind. All things that were wet, for example, were so because of their watery nature—not because liquid was a state of matter, as it is for us. Water could therefore be considered “the primary element” by pre-scientific minds without such minds necessarily presuming that what we mean by water and “the primary element” were the same thing.

5 It is necessary to remain unconfused by the interchangeability of the Great Father and the Hero, with regards to the Mother of All Things, or the Dragon of Chaos. All three elements of experience are regarded by the mythological imagination as primary, in some sense, and any bisexual pair of them can engender being. So the original creation might be the impregnation of nature by culture, or by the hero. The two element creation, however, remains partial and incomplete.
sible depths characterizing the beginning. It was not the erotic aspect of this sexuality that provided its meaning, however, but its creative nature: sexuality is the primary physical expression of creation, the primary means of engendering new forms, and the appropriate ground for its most fundamental metaphorical representation. The *Enuma elish* therefore portrays creative intent on the part of both Tiamat and Apsu. As a consequence of the consummation of this intent, these original parents serve as ancestors to a sequence of elder Gods, their primal children, each identified with a particular domain or place (fresh water, salt water, mud, etc.).

The idea that there is a God associated with each domain of reality—each situation or place—is very complex, and not something easily accessible to the modern mind. This idea stemmed from the phenomenological observation that each locale or habitation that a human being might find himself situated in had not only a set of material or objective features (which we have become so good at identifying, analyzing and using) but a set of implications for action, which might easily be regarded as the spirit of the place, or at least as the inspiring nature of the place. Even in the modern world, libraries and churches are clearly built for meditation and contemplation, formal dining halls or restaurants for mannered celebrations, and pubs and bars for the calling forth of Dionysus, Bacchus or Pan. We are just not as conscious as the ancients of the spirits that inhabit the places we go or build, but we are equally under their control. The social psychologist John Bargh, for example, has produced an influential sequence of studies (see, for example, Fitzsimmons & Bargh, 2003) demonstrating that complex motivational states such as those underlying cooperation, achievement and friendship can be and frequently are “triggered and operate without the person’s intention and awareness...nonconsciously and automatically.”

The link between the locale and the force of that locale on behavior can be most clearly seen in dramatic productions—particularly in movies, and most particularly in animated movies. The background “sets” of such productions are generally matched precisely to the mood evoked and the actions taking place in those sets. A character whose basic motivations are negative or evil is therefore very much likely to be placed in a situation whose aesthetic attributes are in keeping with those motivations, such as a dungeon, or

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6 [http://www.yale.edu/psychology/FacInfo/Bargh.html](http://www.yale.edu/psychology/FacInfo/Bargh.html)
an isolated basement—and in the night, rather than in the day, because the spirits of malevolent evil are even in this enlightened age much more likely to be active in the darkness. Now we do not consider the motivated states that a place is likely to generate part of the intrinsic character of that place, because we define the real as objective and material, a priori. However, that definition is only useful, not final, and it excludes something the ancients could not help but regard as of primary importance. All this is to say that the primordial Gods were both motivational forces, as we would construe them—unconscious motivational forces even, following the psychoanalysts—and that these forces were not initially dissociated from the complex external stimuli that gave rise to them. These gods are an amalgam of place and motive—an amalgam that we would no longer consider possible, philosophically, since we do everything we can methodologically to separate precisely those two categories of being, and to segregate the objective and the subjective.\(^7\)

The creative union of Tiamat and Apsu give rise to a succession of primordial gods, each associated with a landscape or place and, arguably, with the motivational force or spirit inhabiting that landscape. The question then immediately rises: what is the emergent consequence of the production of such a diverse range of places and forces? The *Enuma elish* suggests a sudden acceleration in frenetic and somewhat unconscious action, production and reaction. The elder Gods engage in a variety of ill-specified actions, raising the wind, and disturbing the repose of Tiamat and Apsu, who after much provocation decide to destroy what they had given rise to. When the elder Gods hear of this, they become very upset, cognizant as they are of the great force of their forebears, and they determine to kill Apsu. Apsu, as we have said, plays a relatively minor role in the *Enuma elish*, in terms of description. It is not possible to derive much information about his character. For that

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\(^7\) It should be noted, however, that this division is “unnatural.” There is compelling evidence to suggest that we perceive with our less conscious motor systems at a more basic level than our conscious sensory systems (Whalen, 1996; Swanson, 2000). It is very much worthwhile knowing that at least one major division of the visual system maps almost solely on to the motor system, allowing vision direct access to action, without any intermediation whatsoever of what we normally consider perception. To be motivated in the presence of something is therefore something even more fundamental than the detection of its objective sensory or perceptual features. We directly perceive meanings, as Gibson (1979) suggested.
reason both the meaning of his role and the consequences of his death remain implicit in the story, difficult to tease out.

The idea that permeates religious phenomenology is that ultimate reality is a kind of chaotic totality, characterized both by an infinite expanse in time and space, and an unformed or undifferentiated nature. For that infinite and unformed nature to adopt genuine, albeit limited form, it must be filtered or interpreted through an already extant framework. In mythology that framework is most frequently attributed a patriarchal nature, as order, culture, or tradition. It is very interesting to note that good evidence can be derived from the domain of modern neuroscience to support the idea that conscious reality (that is, the experience of reality) is constructed in something very much approximating this manner. What the human brain encounters before it gives structure to what it encounters is not really something material in the classical sense. Instead, it is much more like a plethora of complex patterns, some of which can be usefully interpreted as material, but some of which form the basis for the construction of “spirit”—both human consciousness and the structures that help give rise to that consciousness. It is therefore not too much to say that the brain constructs matter and spirit or psyche out of something more fundamental than either (Peterson & Flanders, 2002).

Whenever the brain encounters something novel or anomalous, it encounters something too complex for simple interpretation. No extant machine, for example, can make “reality” out of nature. The world as such can simply be interpreted and reinterpreted in too many valid ways, all equally true, all differing in their completeness, implementation cost, and aim. In consequence, the brain appears to subject this complex initial transcendent reality to a sequence of filters, whose aim is the reduction of infinite patterned potential to graspable and pragmatic reality (Vollenweider, 2001; Vollenweider & Geyer, 2001). It does this in large part through its own physical limitations (there are electromagnetic wavelengths, for example, that human beings cannot see, and which are therefore filtered a priori), in part through the application of acquired knowledge and skill, and in part through the application of memory, implicit as well as explicit (for example, visual areas far down in the processing chain and therefore “primary” are still innervated more by higher processing areas involved in visual memory than by lower areas hypothetically more in touch with what used to be regarded as primary sensation).
From a mythologically-informed perspective, the world as experienced is therefore a set of hypotheses and assumptions, fundamentally pragmatic in nature, simplified and incomplete (low-resolution, in fact). These hypotheses are laid upon an inconceivably complex underlying potential, and are extant in part because of the particular nature of the biological structures that are doing the interpreting and processing. Such structure has a particular size, for example, and a particular duration. In consequence, patterns of a particular size and duration (although no more “real” than any number of others) are much more likely to emerge on the stage of human experience and announce themselves as fundamental. We see only a fragment of what exists or what could potentially exist, and that fragment is a consequence of the imposition of an a priori interpretive structure. The output of that structure is not wrong, but it is not absolutely correct, either—and its utility is in the final analysis judged pragmatically. Certain experiences are likely to result in the maintenance and procreation of the forms that instantiate them, incomplete though those experiences might be. Thus the final court of truth to which our judgments of reality are brought is Darwinian in nature, and not the court of ultimate truth, whatever that might mean in any case for beings as limited in capabilities as we are.

The repose of Tiamat and Apsu, nature and culture, finds itself disrupted by the frenetic activity and disputes that increasingly begin to engage their provisional creatures. This means partly that every action—every motivated action—produces consequences that are not intended. The fact of unintended consequences has been represented mythologically in the form of the hydra, a being in part equivalent to Tiamat, and one capable of generating seven heads for every one that is cut off. These unexpected heads can swamp the active agent. The disruption of the primordial parents’ repose therefore also means that the danger of initial conditions can be regenerated accidentally, by the careless assumptions and actions of those presently alive. Tradition (Apsu) holds primordial chaos (Tiamat) invisibly at bay—just as the smooth running of well-established laws and customs ensures intrapsychic stability within and day-to-day harmony among the members of a given society. This very invisibility can be confused by the ignorant with unimportance, as a well-functioning societal tradition can operate so much in the background that its protective capability may be easily dismissed. The careless killing of Apsu by his sons is an event that fits precisely in this category. Tradition is
a dangerous thing, but its careless eradication is even more dangerous. Chaos lurks under order. This is represented in the *Enuma elish* by Tiamat’s absolute and terrifying outrage upon her gaining knowledge of the untimely death of her partner. She decides to go to war on her creatures, generating many kinds of monsters and electing Kingu, the most terrible of them all—the most evil—to “determine their destiny” or to rule over them.

It is not that Tiamat’s capacity for outrageous action is particularly surprising either to the Mesopotamians, or to the elder Gods. After all, she is represented in reptilian and suboceanic form, and she inhabits the terrifying depths and the unknown. She is given that form and habitation because the terrible mother of all things, the ultimate generatrix, is destructive and malevolent, as well as creative and benevolent, in that the formless chaos out of which things rise may return those things to itself at a moment’s notice. Of course, modern individuals remain keenly aware of this, because we are inevitably possessed by the sense that our frenetic activity is producing dangerous alterations in the world order. Our actions are upsetting Nature, and she might turn on us. That is a classic Sumerian fear. Nothing has changed in the last five thousand years. Is it not reasonable to point out that it is greed, and status-seeking, and selfishness that allow modern people to fish the oceans dry? Are these not well conceptualized as ancient and primitive gods? Tiamat is the ancient representative of Chaos, generative and destructive Chaos, and she gets irritable if too many things change—particularly if they change carelessly, and without respect. So the Sumerians say, “Well, the elder gods cause a lot of racket. They move around the planet, and they upset Tiamat, and she decides that enough is enough, and determines to wipe them out.”

The gods are threatened. Nonetheless, they continue their activity, unabated, as well as their tendency to produce new generations of gods. In consequence, while the battle between Tiamat and her children begins to rage in the background, a new and remarkable god is born. This new god, Marduk, is a latecomer in the development of the heavenly hierarchy, and the supreme deity of the Mesopotamians. He emerges on the scene as a problem-solver, characterized by the attributes of higher consciousness, such as vision and light. He has eyes that encircle his head, for example, so that he can see in all directions simultaneously. He has a very highly developed linguistic capability. He can turn night to day, for example, merely as
a consequence of uttering the appropriate words, and is thus master of both chaos (the night sky) and order (the day sky). Marduk is also represented as a god of courage, voluntarily willing to confront chaos, the terrible unknown—but not without due payment. Tiamat defeats the elder gods, one by one. Chaos overcomes them. They turn in desperation to Marduk, despite his youth. Prior to agreeing to engage Tiamat, however, Marduk strikes a harsh deal, requiring the permanent subordination of all his fathers. The elder gods are compelled to elect him sovereign, to make him “master of destiny”—the ritual model for emulation, and the final authority. What does that mean, exactly? Well, these archaic stories are polysemic, in Northrop Frye’s (1982) terminology. This means that they can be read at multiple levels of analysis.

Consider, first, the story of maturation. A typically immature individual remains under the dominion of assorted primordial gods and goddesses—aggression, fear, panic and, according to Freud, a certain degree of sexuality and pleasure seeking. The infant, for example, essentially moves from domination by motivated state to domination by motivated state. It is not until the age of three or four that all of those fundamental motivational forces start taking on a structured relationship to one another (under the pressure applied by the social world; as a consequence of the maturation of the prefrontal cortex). As the personality becomes integrated, a single motive force starts to bring the underlying motivational systems into harmonious arrangement. This motive force is one associated with higher consciousness—and with evolution/maturation of higher-order cortical circuitry.

Consider, second, the problem of psychology—both developmental and social. The Mesopotamians tried mightily to determine who should rule, given the original dominion of the elder gods, the instincts. Who should be in charge, when chaos threatens? How should a hierarchy of values be constructed? How should sense be made of the order, the hierarchical order, represented by the merger of dozens or hundreds of tribes, over great spans of time?—a problem the Mesopotamians continually faced, as one of the first great civilizations. Marduk might well be considered a product of the merger of many tribal gods—indeed, he had dozens of epithets, among his followers. He can also be thought of as a representation of the force that emerges to put all fundamental motivational forces in sequence. It is useful in this light to remember that the Mesopotamians associated him with the sun, with consciousness and illumination, and with language.
Religion, Sovereignty, Natural Rights

The Mesopotamians formulated the following idea, in implicit, dramatic form: “when the elder gods remain in charge, then Chaos constantly beckons and the archetype of evil (Kingu) comes to be the very thing that determines destiny.” Human beings motivated fundamentally by instinct act without forethought, without the capacity to consider others or their future selves. Even if not cruel, like the psychopath is cruel, they are as impulsive as a two-year-old. A personality—or a society—characterized by such a primitive mode of being will tend towards a tragic and painful destiny, and corrupt itself with resentment. It is perfectly appropriate to characterize such a mode or path of being as dominated by the archetype of evil. Something has to counteract that destiny, for the world to continue. In their dramatic form, the Mesopotamians observe that the society had better be governed by something more than what the elder gods represent, when chaos beckons, because the elder gods both engender and are defeated by that chaos.

In charge, and armed with the agreement of his forebears, Marduk grasps his sword and his net, and sets off to conquer Tiamat. Neither the sword nor the net are meaningless details. Jung (1956/1976), for example, regarded both differentiation (solve) and synthesis (coagula) as primary but antagonistic aspects of the process underlying personality development. The analytic aspect of consciousness analyzes what appears to be a homogeneous whole on first apprehension into its diverse constituent elements. The synthetic aspect of consciousness, by contrast, weaves diversely differentiated elements into a coherent and comprehended whole. Edna Foa’s work on the reconsideration of memories of assault provides solid evidence for the utility of voluntarily facing and attending to chaos, even when traumatic (Foa & Kozak, 1985, 1986; Foa, Feske, Murdock, Kozak & McCarthy, 1991). In addition, there are now more than forty experimental studies, pioneered by James Pennebaker (Pennebaker & Francis, 1996), demonstrating that it is the linguistic organization of chaotic or traumatic or unconsidered elements of experience, rather than catharsis, that produces positive benefits on immunological, psychophysiological and psychological function (reviewed by Smyth, 1998). Such facing and revisioning might be regarded as two aspects of the attempt to weave disparate experiences—particularly those associated with high degrees of negative emotion—into a network of meaning. Traumatic experience is traumatic precisely because the information it contains has potentially unbounded effects on the largely implicit and unconscious
presumption structure currently characterizing the individual (Peterson, 1999). Traumatic experience re-engenders chaos. Enclosure, mediated by attention and language, means control, and limitation, and re-establishment of protective boundaries.

Once Tiamat is trussed and encapsulated, Marduk uses his sword and divides her in two, then cuts her into pieces, and constructs the habitable world from her remains. Thus the exploratory hero makes the world as a consequence of his encounter with the generative unknown. This idea was so well developed among the Mesopotamians that it was virtually explicit. One of their many names for Marduk was precisely “he who makes ingenious things from the conflict with Tiamat” (Heidel, 1965, p. 58). The mythological description of this process is of course reminiscent of Plato’s injunction to “cut nature at her joints,” in order to further the process of understanding (an injunction whose essential theme underlies the entire practice of modern science).

Marduk also deprives Kingu, Tiamat’s most potent and evil ally, of the tablet of destinies. He had already obtained one such tablet from his procreators, the elder gods—an action that signified his emerging dominion over what was once their territory. Thus he became master of culture and tradition. Afterward, he triumphs over nature and chaos, in the form of Tiamat. This victory is viewed by the Mesopotamians as a simultaneous defeat for evil. This is a stunningly creative and provocative idea, and it echoes throughout both religious and secular history for the many centuries following the demise of the Mesopotamian civilization. Voluntary confrontation with chaos and uncertainty defeats chaos, redeems culture, and deprives evil of its motive power. Why? The makers of mythological tales presume that evil thrives on decadence, existential terror, and individual avoidance of responsibility. Tellingly, in this regard, Marduk makes mankind out of Kingu’s blood. Then he sets his new creatures to the task of eternally serving and satisfying the demands of the elder gods. What this means is twofold.

First, the Mesopotamians presumed that the capacity for deceit and evil characterizing the pre-eminent minion of angry chaos was an integral and fundamental part of man. This idea saturates the second creation story in Genesis and the entire theology of classic Christianity, with its emphasis on original sin the fallen nature of man, and the battle between Satan and Christ for the human soul.
Second, the Mesopotamians presumed that man’s destiny was and would forever be subjugated to the demands of the elder gods—primary motivational forces and implicit demands of situation and place. It is for this reason that the ancients regarded mortal men as mere playthings of the Gods. From the Mesopotamian perspective, such motivational forces only remain at rest once serviced. A man in the grip of the desire for never-ending power, for example, may feel that his actions are voluntary. However, it is perfectly reasonable to regard him as a pawn of a transcendent force, whose ultimate aims may not be coincident with his own personal interest. The same might well be said of someone possessed by obsessive love or lust or struggling in the grip of an eating disorder.

The manner in which the Mesopotamians “played out” their understanding of the drama of Marduk should be of no small interest to the modern thinker. Even the best of enlightened rationalists presume that the foundations of modern democracy can be traced, sufficiently, to the enlightenment, with its emphasis on reason and its skepticism of religious claims. The problem with such a notion is precisely the problem posed by the Cold War. If the claims of intrinsic human right are merely rational, then they remain arbitrary, dependent for their validity on nothing more than the coherence of the story that their application can generate. Hence their philosophical fragility in the face of Communism, with its equally logical \textit{a priori} assumption “from each according to his ability,” and of Fascism, predicated on the equally reasonable notion that the strongest and most brutal is most equipped to rule. For such reasons and in the light of the events of the twentieth century the West could do well to hope that its most cherished assumptions—“we hold these truths to be self-evident”—are grounded in something far more substantial than mere axiomatic opinion. A thorough assessment of the religious ground out of which such ideas emerged—over millennia, instead of mere decades or centuries—can demonstrate precisely that.

Marduk was the ritual model of emulation for the Mesopotamian emperor (Eliade, 1978). During the New Year’s festival, when the habitable world was renewed, the king undertook a sequence of activities, grounded in archaic tradition, understanding, consciously, only what a child understands when he is playing a game. This is not to denigrate the intelligence of the Mesopotamians. They were biologically identical to modern men and certainly capable of the same
quality of thought. It is instead to point out that human beings act out what they do not yet understand. Some kinds of knowledge are encoded in patterns of behavior long before they can be rendered fully conscious and philosophically explicit. It is for this reason that Shakespeare can be regarded as a precursor of Freud, even though he was by no means a psychologist. Drama precedes knowledge.

At the beginning of the yearly renewal of time, the king was first stripped of his emblems of power. This dissociated him, as an individual, from the trappings of his office, and revealed him as an individual, vulnerable, like other men. He was then ritually humiliated by the high priest, who stood for the highest deity—for the ultimate value that transcends all earthly values. On his knees, he was struck in the face, and required to offer a declaration of innocence, proclaiming his status as a true follower of Marduk: If he was a Good King, his conduct was emblematic of the process by which chaos is constantly turned into order. In consequence, the high priest reassured the sovereign, noting that his dominion was certain to be increased, if his protestations were true.

This is a remarkably complex ritual. First, the sovereign must be humiliated. This means that the Mesopotamians already understood, in dramatic form, that pride and blindness are inextricably linked. The earthly ruler is always prey, mythologically speaking, to a Luciferian grandiosity, which can easily expand to the unwarranted assumption of final omniscience. The pioneering cognitive psychologist George Kelly, searching tongue-in-cheek for a myth to buttress his claims, settled on the story of Procrustes, who trimmed his guests to fit his bed (Kelly, 1969). The Luciferian assumptions of the tyrant, unwarranted by fact, demand the re-arrangement of the world to fit the model. This leaves the tyrant unbothered by factual or existential challenges to his own all-encompassing wisdom and power, while the kingdom inevitably degenerates. It is impossible to confront the chaotic unknown if that domain has been deemed non-existent, as a consequence of sovereign fiat. To reject what is still not understood is precisely to deviate from the path of Marduk, which is sight and language harnessed and voluntarily directed towards creative encounter with chaos.

Subsequent to the king’s humiliation, the statues representing the elder gods were gathered together. At their head, the king marched in procession, outside of the city of Babylon—outside the dominion of order or civilization. There the primordial battle between the hero
and chaos was mimed. After victory was re-attained, a great banquet was held, and the king was mated to a ritual prostitute, signifying the positive and creative aspect of the great Tiamat (echoing her role in the initial production of the world, and its secondary reconstruction by Marduk).

The king’s sovereignty was predicated on his assumption of the role of Marduk. That sovereignty was not arbitrary: it remained valid only insofar as the king was constantly and genuinely engaged, as a representative or servant of Marduk, in the creative struggle with chaos. This is in fact what made him a ruler, capable of extending his dominion, and of embodying Marduk’s other benevolent attributes, all considered a consequence of the courage to confront the primordial matrix. These included the bearing of light, the granting of mercy and justice, the creation of rich abundance, and the generation of familial love, among many other capacities. Sovereignty itself was therefore grounded in Logos, as much for the Mesopotamians as for the modern Christian—and equally as much for the ancient Egyptian and Jew (as we shall see). This notion of sovereignty, of right, is not a mere figment of opinion, arbitrarily grounded in acquired rationality, but a deep existential observation, whose truth was revealed after centuries of collaborative ritual endeavor and contemplation. Existence and life abundant is predicated on the proper response of exploratory and communicative consciousness to the fact of the unlimited unknown.

**Ancient Egypt: Osiris and Horus**

Societies that have managed to render themselves stable over long periods of time have solved the problem of how human interactions should proceed. This is a very complex and dynamic stability, however, because things change. In the land of the Red Queen, as Alice discovered, everyone must run as fast as they can, just to stay in the same place. Stability can not mean stasis, because the environment is in a state of constant flux. A society that lasts therefore must balance predictability and originality, and allow old but once useful forms to die—and to re-emerge, if necessary, transformed. It is for this reason that the ancient Egyptians worshipped Osiris and Horus, simultaneously—the god of stone and stability and the god of sight and transformation.
The Mesopotamians told a remarkable story, but the Egyptians may well have done them one better. Remarkably, too, they did it very early. According to Eliade (1978), the fundamental story that drove the development of the great Egyptian cultures was revealed at the beginning of the Egyptian dynasties, rather than at the middle or the end (as might be presumed, if the Egyptians derived their religion from the structures of their society, rather than the other way around). The Egyptians were driven by the revelation that the most fundamental of gods was one who created as a consequence of his tongue and his speech—a revelation very much akin to the Sumerian idea with regards to Marduk and to later Judeo-Christian ideas.

The developmental sequence of culture—first revelation, then civilization—poses a tremendous mystery. Jewish culture flourished as a consequence of the ideas, central to Judaism, revealed to the ancient Hebrews several thousand years ago. The Christian revelation drove Western society, in the same manner, much later. After that, the same could be said about Islam. How is it that the religious drama can be primary, given its fundamentally implicit nature, its incomprehensibility, and the unconscious manner of its derivation? It is as if the people possessed by the religious insight—some uncanny combination of behaviorally-coded ethical knowledge, imagistic representation and, finally, verbal instantiation—are given a new source of direction, purpose, as well as freedom from anxiety. Somehow the newly revealed story is capable of uniting people, and of driving them forward. Somehow some heretofore intangible purpose, something less conscious than a dream, manifests itself with enough power to unite a people and motivate a new civilization. Such a thing seems to happen when a society becomes at least partially conscious of the games they are already playing. The newly emergent concordance of description with action seems both clarifying and liberating. We know very well from modern clinical/experimental accounts, such as those provided by Pennebaker, that individuals are more hopeful, more productive and less anxiety-ridden when they have developed narratives about their past, present and future that are insightful and coherent. Such narratives seem to serve a beneficial purpose because they simplify planning—at least in part. A good narrative provides a goal capable of uniting diverse subgoals, within and between individuals. A good narrative helps its listeners identify the causal pathways that lead to the goal, so that they do not wander down counterproductive paths and disappear. A good narrative establishes
a mode of being whose end purpose is transcendent, so that it stands above all things proximal and finite, but whose nature is still clear enough so that everything else can be bent to its service. It might be said that a mode of being of this sort is half buried in art, so that it cannot be defined entirely—or easily argued away—but that it remains clear enough so that the outlines are comprehensible. The figure of Christ serves such a purpose. So does the figure of Buddha. Such a figure, goal and path, is a dramatic, embodied and dynamic ideal—a personality, a way of being, rather than a fixed end point.

The Egyptians developed a drama to represent such an ideal. Like all complete religious stories, it represents the constituent elements of experience: individual, society, and nature, in their positive and negative manifestations. This drama helped the Egyptians clarify the nature of individual being, in relationship to society and the unknown world. It helped them understand the intrinsic and emergent nature of sovereignty, as such, rather than as something merely embodied in the person of the current ruler. It helped them develop a philosophy of power, applicable both to the individual and to the social world. It is altogether a remarkable story, and our culture is indebted to it in ways that we are still far from realizing.

There are four players in the Egyptian drama: Osiris, god of stone, his evil animal-headed brother Seth, his wife Isis, queen of the underworld, and their son, Horus, the all-seeing eye, often represented as a falcon. Osiris, the patriarch of the family, was a remarkable man/god. He was the founder of the Egyptian state, from the mythological perspective—an individual like Romulus or Remus, in the case of Rome (both mythological figures) or George Washington for the U.S. (who, like Elvis, is well on the way to becoming mythological). Osiris was a figure who represented the totality of all of the people who had actually constructed the Egyptian state, in its nascent form, over the centuries that it developed. Osiris was therefore the great father of Egypt, in its past glory. He was no longer well adapted to the present, however, because the present constantly shifts. Osiris was therefore an aged god, archaic, and willfully blind. He represented the tendency of a well-established society towards unthinking conservatism, dreams of past glory, and wishful thinking. He was great in his youth, but lost contact with things as time passed. The rules that he lived by, traditionally, were not necessarily applicable in the present, and some of the things that he chose to ignore or did not know at all emerged as newly paramount in importance.
It was therefore necessary for Osiris to have an evil brother, Seth. Seth, who turns into Satan as mythology develops through the centuries, is partly the dark side of social organization—its tendency towards authoritarianism, fear of novelty, and vengefulness. Seth might be regarded as a combination of the tendency for every bureaucracy to maintain its structure (and to therefore oppose every form of change) and the fact that bureaucratic self-preservation is rendered more dangerous by willful blindness and spite.

Seth wants undeserved dominion over the Egyptian state, and he is perfectly willing to use treachery and deceit to get it. Osiris ignores the machinations of his evil brother—partly because he is old and decrepit, and partly because he does not want to see Seth’s true nature (the Egyptians place particular stress on this latter trait). He does not want to see the possibility for evil that is by necessity twin to state power. Seth therefore waits for Osiris to weaken, attacks him, chops him into pieces, and distributes those pieces all over the Egyptian state, so they cannot be easily re-assembled. Seth cannot kill him outright, because Osiris is a god. The old king never dies, the villain never dies, and the hero never dies. This is because there is always “the old king.” Likewise, there is always “the villain,” and “the hero.” These entities are transcendent, transpersonal, because they represent aspects of experience that never change. Even if particular individual embodiments of what those figures represent are eliminated, new embodiments manifest themselves immediately. The final battle with evil is never won, therefore, in mythological representation. Evil is a permanent property—a permanent constituent element—of the world of experience. The same can be said of the state. It cannot disappear, even if its overarching structure is temporarily disrupted. When it has been disrupted, the possibility of the state merely reverts to potential, residing in its now-divided parts.

Osiris therefore ends up living in spirit in a shadowy, ghost-like form in the underworld, and Seth takes over the kingdom (much to its detriment). Fortunately, Osiris has a wife, Isis. Isis had a huge following in the ancient world. She was ruler of the underworld, and a very powerful goddess. Like Tiamat, she represented the primordial chaos underlying the habitable forms and structures of the world. Isis rules confusion and opportunity. Individuals fall under her power

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8 See also Daniel 2 and Matthew 24.
whenever their beliefs are powerfully violated—whenever they lose faith and suffer betrayal. She represents destruction and death, but also creation and renewal. For something new to arise, something old must give way. Isis therefore rules the domain of transition. She gets wind of Osiris’ destruction, and determines to oppose it. She searches all over Egypt until she finds his phallus. With it, she makes herself pregnant.

The collapse of any great order brings with it new potential. Large structures do not merely collapse into dust, when they fail. They are complex hierarchies of quasi-independent units. When they disintegrate, such units still retain much of their functionality. They can therefore be revivified, as these unit parts are reorganized and reintegrated into more thoroughly adapted superstructures. The demolition of one form of order thus brings with it the possibility of another. Culture cannot be so easily destroyed. When its highest-order structures fall, the structures that remain gather new information, change their manner of interconnection, and rise again. Culture can be hacked up into bits, disembodied, and introduced to chaos. No matter: it retains the potential for new birth, and can rise like the phoenix from the ashes.

So Isis, the matrix, finds Osiris’ phallus, the container of the seminal idea, the germ of culture, and she makes herself pregnant. Then she gives birth to Horus, the long-lost son of the once-great king, a very typical and profound mythological motif. Horus, like all maturing sons, is alienated from the kingdom, and lives partly in the underworld, in Isis’ domain. This means, of course, that the son is always in some profound sense “fatherless,” as the structures of the past are eternally insufficient to ensure the complete stability and comfort of the developing individual. Horus grows up outside the classical structure of the Egyptian state, which is now tilted terribly towards evil, in any case. When he reaches maturity, however, he decides to reclaim his rightful heritage.

He travels back to Egypt, and confronts Seth. They engage in a vicious and dangerous battle, and Seth gouges out one of Horus’s eyes. This is an indication of just exactly how devastating it is to battle with the forces of evil. Horus can see through Seth, because his vision is clear. However, the forces represented by Seth still present a critical threat to the integrity of consciousness, even when it is thoroughly prepared—even when such evil is encountered voluntarily. Luckily enough, however, Horus proves himself superior to his
foe. He defeats Seth, and banishes him to the nether regions of the kingdom (he cannot kill him, because evil is immortal). He also regains his eye. The story might end here: Horus recaptures his eye, restores his sight, and rules happily over his recovered kingdom. That is not what happens, however—and this is where the Egyptians reveal their true genius.

The Egyptians believed, paradoxically, that their pharaoh was the living pharaoh and the dead pharaoh, at the same time. Such a statement makes no sense, rationally, but it makes a lot of sense from a mythological perspective. The Egyptians noticed that the role of pharaoh was so all-encompassing that it transformed the person who adopted it. Such a role is necessarily composed of the tremendous weight of the tradition that it represents. Every experience changes the person who has it. Physicians and lawyers in our modern culture are, for example, very much transformed by their training and their position. It is much more so for the individual playing the role of president or prime minister. So the president is partly the person, and partly the role—and the pharaoh is the live pharaoh, the living person, and the dead pharaoh, the cultural tradition: the king is dead, long live the king.

Paralleling that idea was another, similar idea: the pharaoh was not only the dead pharaoh and the live pharaoh at the same time, but also Horus and Osiris, at the same time. How does this play out? In the story, as told to this point, Horus has defeated Seth, and recovered his eye. He could therefore be king, all by himself. However, he is not truly sovereign, yet, and he cannot become so, in isolation, no matter how conscious and prepared he might be. It is the rest of the story that has the most significance for modern people. Future-oriented, and dismissive of the past, modern people are likely to sidestep their obligation to their culture. This is a genuine failure of responsibility, and it is very dangerous. Observations concerning the outdated and archaic nature of culture provide disingenuous rationale for its abandonment, but it has always been so: tradition is a blind king, or a drowning king, or a trapped king. However, the hero must not abandon his father. He is too unstable and error-prone without him. So, instead of replacing his eye (the most obvious next move), Horus does something unexpected and foolish. He leaves his kingdom, and goes right back down to the underworld, where Osiris is living in his ghostlike and near-dead manner, since being demolished by Seth. Horus finds Osiris and
grants him an eye. That eye—the eye of youth, the eye of the falcon—enlightens Osiris, and gives him *vision*. Then Horus takes his newly revitalized father back to Egypt with him, arm-in-arm, and they rule the kingdom together.

Horus voluntarily stops his father, tradition, from rotting away uselessly in the underworld. He grants him sight, and brings him back to the surface, back to real life, as a full partner. It is the *conjunction* of Osiris and Horus that constitutes the basis for Egyptian sovereignty. All societies have to manage the exceedingly complex job of imposing enough stability, so that everybody within the society is not constantly plagued by novelty-induced terror, and allowing enough novelty and transformation, so the society can maintain its adaptation to constant change. To do so, a society must be free enough so that the individuals within it can express their own unique individuality, which is something that can not be encompassed within a stridently predictable social order, but disciplined enough so that individuality is carefully honed and sharpened. This is a staggeringly brilliant realization. It is nothing short of amazing that the Egyptians understood this, even though they did not do so explicitly. *We* do not yet do so explicitly. Our Horus-oriented culture undermines its traditions without thought, and constantly undermines its necessary stability. It is for this reason, in part, that we have trouble with meaning, or the lack thereof. We consider the traditional aspects of our culture (the religious aspects) beneath our notice, particularly when we are educated, and we do not understand that we have the responsibility to revitalize them. This is no trivial matter. First, our civilization is dependent on those traditions, in ways that are not obvious, but are nonetheless true. Second, it is ignored intimations of the importance of that traditional structure that drives the increasing tension between fundamentalists, who oppose modernism, and modernists, who casually dismiss what they do not understand.

Horus is Marduk, for all intents and purposes. He is the exploratory hero (hence the eye, which is also a cardinal figure of Marduk). Horus fights political and social corruption, rather than the chaos that confronts Marduk, but these are the same phenomenon, manifested in two different manners. The hero confronts the terrible aspect of nature—chaos, in its most brutal form. Equally, he confronts the anachronistic aspect of culture, and the evil that speeds the development of such anachronism and decay. These elements are, therefore, indistinguishable, in some important manner: if culture
is not degraded and archaic, chaos will never threaten. The idea of environmental degradation and the revenge of the natural world cannot in consequence be separated from the fact of moral and political corruption. It is the corrupt state that nature destroys.

The actions of Horus dramatically represent the Egyptian conception of sovereignty: first, the ability to see evil and to respond appropriately; second, the humility to recognize personal incompleteness, despite great victory; third, the courage to re-enter the underworld domain of darkness and uncertainty, when necessary, to recover the lost values of the past. This is a spiritual story, with profound psychological implications, as well as a political story. The individual should be awake and alert to the dangers and evils of the state, from family to country. The individual should maintain an acute consciousness of his ignorance, regardless of his power. The individual should master his fear of uncertainty and transformation, and remain open to the knowledge embodied in the past. In this manner, he can be Horus and Osiris, the live pharaoh and the dead pharaoh, refreshed and rejuvenated by Isis, crisis and uncertainty.

Egyptian society was dedicated to deifying the immortal spirit of the pharaoh, the union of Horus and Osiris. It was the embodiment of this union, this immortal spirit, which gave the pharaoh the ability to maintain ma'at. Ma'at was like truth, or good order (Eliade, 1978)—but was also a deity (like all motivational forces, conceived by the ancients). Ma'at might be conceptualized as conscience, as something akin to Socrates’ daimon; as something akin to the relationship established between the ancient Israelites and YHWH. If the pharaoh was properly utilizing the union of Horus and Osiris, properly embodying or imitating that union, he would be blessed with an intuitive or unconscious ability to decide the appropriate course of order. This unconscious ability might be regarded as the end consequence of constant proper action—the benefit of thousands of conscious decisions, carefully made, automatized, and then rendered capable of framing and guiding ongoing behavior.

The Egyptians would pay homage to the embodiment of that union when they said, for example, “the sun has risen,” when the pharaoh walked into the court. They meant, “the power that reigns over the dominion of evil, chaos and the night has arrived.” The Egyptians conceptualized ma’at as the capacity to put order in the place of chaos, essentially, and assimilated the union of Horus and Osiris to that capacity. They regarded this union as something immor-
religion, sovereignty, natural rights

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tal, something valuable beyond conception. This idea of the immor-
tality of the union of Horus and Osiris, and its association with sov-
ereignty, was an absolutely potent idea for the Egyptians. It gave
their whole culture motive force. No less for us.

The Egyptians thought (or acted as if they thought): “the pharaoh
is sovereign. As sovereign, he is immortal. As subjects of his, we do
his bidding, under the ultimate tutelage of Horus and Osiris. We
thus partake in his immortality.” This is an idea that lends tremen-
dous dignity to everyday being, even if only by association. As
Egyptian society progressed and changed, however, the idea of this
immortal individual dignity became more explicit, and less some-
thing real only by association. Eliade describes a process he calls
“the democratization of Osiris.” Initially, certain symbolic forms rep-
resenting the immortality of the pharaoh could only be used by the
pharaoh. In the later stages of Egyptian culture, however, the sym-
bolic representations of immortality started to be adopted by the
aristocracy—high nobles and courtiers. This meant that the process
the Egyptians viewed as integral to the order of the state and of
nature was no longer seen to be embodied solely in the person of
the pharaoh. By the end of the Egyptian dynasties, the aristocrats
themselves were characterized by identity with the immortal union
of Horus and Osiris. Sovereignty had started to spread itself out,
down the great pyramid of society. By the time of the Greeks, sov-
ereignty was an attribute intrinsically characteristic of every male cit-
izen. Barbarians were excluded. Women were excluded. Slaves were
excluded. Nonetheless, the idea of universal sovereignty was coming
to the forefront, and could not long be resisted.

The ancient Jews, likewise, began to develop ideas that, if not
derived directly from Egypt, were at least heavily influenced by Egypt.
Perhaps that is the basis for the idea of the Exodus, since evidence
for its historical reality is slim. The Jews begin to say, and not just
to act out, this single great idea: “not the aristocracy, not the pharaoh,
but every (Jewish) individual has the capacity of establishing a direct
relationship with the Transcendent, with the Unnameable and Un-
representable Totality.” The Christian revolution followed closely on
that, pushing forth the entirely irrational but irresistibly powerful
idea that sovereignty inheres in everyone, no matter how unlikely:
male, female, barbarian, thief, murderer, rapist, prostitute and taxman.
It is in such well-turned and carefully prepared ancient soil that our
whole democratic culture is rooted. These unbelievably archaic ideas,
first acted out, first embodied in ritual, first dramatized, then told as stories, developing more and more coherence over stretches of time of thousands of years—they serve to ground our self-evident notions in something that is much more than mere opinion, mere arbitrary supposition.

**Conclusion: The Transcendent Reality of Value**

Human beings are playing a very complex game—but not one that is arbitrary. Every individual has to get what he wants and needs, not only because he wants it, but also because *society needs to give it to him*. If the social group does not help provide the individuals that compose it with what they want and need, then those individuals can or will not contribute to the society in any reasonable way. As soon as someone can no longer contribute, then society loses access to his or her creative and cognitive resources.

Societies move forward because individuals bring them forward. Since the environment moves forward, of its own accord, a society without individual voice stagnates, and petrifies, and will eventually collapse. If the individual is refused a voice, then society no longer moves. This is particularly true if that individual has been rejected or does not fit—because the voice of the well-adjusted has already been heard.

It is important to know this, because it is impossible to make justifiable claim to a set of beliefs unless there is a rock-solid foundation under those beliefs. If the value hierarchy, which is an absolutely necessary part of individual and social being, is built on sand, then it will not stand when it is challenged (and that is precisely when its solidity is most necessary). It will not compel belief, produce hope and ameliorate anxiety. It will not guide negotiation, prevent capitulation or put a halt to war. All individuals need value structures to guide them in their lives. They have to set goals, and make decisions. Their value structures have to be *real*.

The historical evidence suggests that certain value structures are real. They are emergent properties of individual motivation and motivated social behavior. As emergent properties, moral structures are real. It is on real ground, deeply historical, emergent—even evolutionarily-determined—that our world rests, not on the comparatively shallow ground of rationality (as established in Europe, a
mere 400 years ago). What we have in our culture is much more profound and solid and deep than any mere rational construction. We have a form of government, an *equilibrated state*, which is an emergent consequence of an ancient process. The process undergirding the development of this governmental form stems much farther back even than the Egyptians, even than the Mesopotamians—stems back to behavioral ritual and oral tradition. It is very old, this process, and it produces very reliable results (even if we do not always understand them; even if they can be variably interpreted).

The ideal personality, justifiably granted sovereignty, is composed of an optimal balance of creative exploration and substantive traditionalism. He is also not afraid of the chaos that is attendant upon error, as a signal for necessary change. That optimal balance is what an individual perceives, when he encounters someone who he automatically, pre-consciously, respects and admires. Genuine success in the struggle with nature, the human social hierarchy and the individual soul is a consequence of the literal embodiment of that admirable combination. It has always been that way.

Our political presuppositions—our notion of “natural rights”—rest on a cultural foundation that is unbelievably archaic. That foundation, in turn, rests on something even more fundamental. Chimpanzees, ever so closely related to human beings, live in dominance hierarchies, like their human cousins. They are very aggressive, especially the males, but they are also very cooperative (de Waal, 1989). Despite their aggression, the males spend a substantial amount of time repairing social boundaries in the aftermath of an aggressive incident, because they are just as concerned with keeping the hierarchy intact as they are in climbing to the top of it. They have to be. It is the most politic chimpanzee, too, that maintains his position, sexually and socially, rather than the most aggressive (de Waal, 1989). Likewise, rats play fair (Panksepp, 1999), and wolves will not kill a subordinate pack member once they have defeated it. The dominant wolf allows the subordinate wolf to maintain its own existence. Even wolves have this notion, this procedural or action-oriented “notion,” that even those who appear insignificant may still contribute to the integrity and health of the whole.

Even the chimpanzee and the wolf, driven by their biology and culture, act out the idea that sovereignty inheres in the individual. Human beings have taken the idea much further, of course. We
have observed it in action, and codified its details and consequences. We have turned it into religion and philosophy, implicit and explicit knowledge. No matter what an individual does, in modern society—even if he is in clear violation of the law—his natural rights remain intact. No matter how outcast he is, how apparently beyond redemption, his existence may still contribute something to the integrity of the whole. This is not merely a “metaphysical” idea. Nor can it be dismissed, regarded as a merely rational construction, without such dismissal threatening the integrity of the modern state, psychological and social.

How has it become appropriate, then, to presume that everything we rely on is arbitrary? A true fan of modernity and rationalism would point proudly to the capacity for critical analysis enabled by our times and intellectual abilities. However, it is starkly obvious upon close examination that our religious stories are not about the same thing that our scientific theories describe. In consequence, it seems that the inability to distinguish between them must almost certainly be motivated. Ancient stories proclaim that the wisdom of the past cannot be rediscovered without the ability to identify and defeat evil, the courage to withstand the terrors of the underworld, and the humility to see the self as unworthy, if it is not informed by tradition. Why bother with all that, if God is dead?

Modern people believe that it is the application of their critical rationality, their hard-won critical intelligence, which has necessarily deprived their lives of transcendent meaning. This seems a very self-serving and therefore suspect interpretation: “we are so intelligent that it has become clear that life is meaningless.” Perhaps it is not precisely our intelligence that is whispering such a doctrine into our ears. Perhaps the modern individual is faced with a choice: life with meaning rationalized away, and responsibility therefore eradicated—or life with every action seen as necessarily meaningful, and adoption of the ultimate responsibility described by Dostoevsky and Solzhenitsyn. Who would ever choose the latter? Science has not chased God away. Cowardice in the face of such a burden has chased God away. Natural rights truly exist, and they come with natural responsibilities. Some truths are indeed self-evident.
References


ORDINARY SPIRITUAL EXPERIENCE:
QUALITATIVE RESEARCH, INTERPRETIVE GUIDELINES,
AND POPULATION DISTRIBUTION FOR THE DAILY
SPIRITUAL EXPERIENCE SCALE

Lynn G. Underwood*

ABSTRACT

The Daily Spiritual Experience Scale (DSES) is an instrument designed to provide researchers with a self-report measure of spiritual experiences as an important aspect of how religiousness/spirituality is expressed in daily life for many people. The sixteen-item scale includes constructs such as awe, gratitude, mercy, sense of connection with the transcendent, compassionate love, and desire for closeness to God. It also includes measures of awareness of discernment/inspiration and transcendent sense of self. This measure was originally developed for use in health studies, but has been increasingly used more widely in the social sciences, for program evaluation, and for examining changes in religious/spiritual experiences over time. It has been included on the U.S. General Social Survey (GSS), and the items have shown high prevalence in that population. The challenge of identifying items that tap the underlying constructs was addressed through qualitative methods, both in the development and testing of the instrument. Translations have been made into Spanish, Korean, Hebrew, Vietnamese, and French, and the scale has been effectively used outside the United States. Detailed discussion of item construction based on qualitative work is given to assist in use, interpretation and translation development. Options for scoring and suggestions for exploring correlations with other variables using individual items and subgroups are also presented.

Introduction

The Daily Spiritual Experience Scale (Underwood and Teresi 2002) is a sixteen-item written self-report measure designed to measure ordinary or “mundane” spiritual experiences, not the more dramatic

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mystical experiences such as near death experiences or hearing voices or seeing visions. It measures experiences of relationship with and awareness of the divine or transcendent. It measures how beliefs and understandings are part of moment-to-moment features of life from a spiritual or religious perspective. This paper has three main purposes. First, it aims to facilitate use of the DSES, interpretation of results, and translations of the instrument by providing background on the conceptual and qualitative development of the DSES and examples of studies using it. Second, it aims to contribute substantively to various discussions about measurement and the multidimensional construct of religiousness/spirituality through the description of the evolution of this instrument. And finally, it aims to present some of the details of the qualitative work and quantitative data from the U.S. General Social Survey (GSS) that are, in and of themselves, informative about the nature of spiritual experience.

Context of this measure: Religiousness/Spirituality

The DSES was originally developed in the context of an initiative to compose a multidimensional measure of spirituality/religiousness that could be effectively used in health studies targeting various domains of religiousness/spirituality. This larger multidimensional measure, funded jointly by the National Institute on Aging of the National Institutes of Health and the Fetzer Institute, is increasingly used in many studies of health care (Idler et al. 2003). As the group of social science researchers reflected on which domains were appropriate for inclusion in that initial set of multi-domain instruments, they decided to include: Religious Social Support, Religious Coping, Private Practice, Public Practice, Meaning, Values, Beliefs, Religious/Spiritual history, Denominational/Traditional Affiliation, and Commitment. As the list became solidified and psychometric measures of those domains were filled in, a gap appeared. As a member of the group, Underwood noted that “mundane” or ordinary experience of the transcendent or sense of the divine was not explicitly included, and that this experience might be particularly salient for health. Underwood had spent much time studying psychosocial factors such as stress and social support and edited textbooks detailing how these factors are and should be measured and how they affect health (Cohen, Kessler, and Underwood 1997; Cohen, Underwood and Gottlieb 2000). In that context, the nitty-gritty of daily inner attitudes and feelings
seemed an important aspect of people’s spiritual/religious lives. At the invitation of the group, Underwood rapidly developed such a measure of “daily spiritual experiences” so that that domain could be included in the brief multidimensional measure that was needed immediately for use in a variety of studies, and for inclusion in a national social survey, the GSS, conducted every two years by the National Opinion Research Center (NORC) at the University of Chicago. Simultaneously with this, a full sixteen-item version was developed and has been used in many studies (Underwood and Teresi 2002).

A key intention of Underwood, as a major organizer of the working group developing the multidimensional measure in 1994, was to heal some of the fragmentation that was beginning to develop in the field of scientific study of religion, as social science and medical researchers who had not been doing religion research began to gravitate towards the notion of “spirituality.” Most of the research up until that time had focused on the study of “religion,” with a broad definition of that term. Much of the data at the interface of health and religion had emphasized the positive relationship of frequency of church attendance to health, an explicitly “religious” measure and an implicitly social one. Attendance at religious services, however, forms only a small part of how religious orientation expresses itself in people, omitting domains such as commitment, beliefs, and private practices such as prayer and meditation. Meanwhile, the concept of “spirituality,” both within religions and without, was gaining in usage. In the early 1990’s, many researchers in both the health and social sciences, most of whom were not religious themselves, were more comfortable with the word and concept of “spirituality” than with explorations of religiosity. But also at that time, the word “spirituality,” for many religious people, often had a “New Age” connotation. Thus, another issue was how to actually define “spirituality.”

Since that time, general usage of the word “spirituality” has spread, and its meaning and that of “religiosity” have changed in general usage. The phrase, “I am spiritual but not religious,” is becoming familiar, often supported by scientific survey research which has frequently encouraged the dichotomization of those constructs. The DSES was constructed as a scale that allows for an “overlapping circle” concept of religiousness/spirituality. A few people are engaged in religious activity with no spiritual sense of it—for example a person
who goes to church, reciting the creeds aloud, in order to make contacts for his insurance business. Most people nest their spirituality in some sort of religious faith, wording, and/or activities (spiritual and religious). And a relatively small group of people have a spirituality that is not historically or presently connected to any form of religious belief, activity, or concepts (spiritual but not religious). Various authors have tackled refinement of these definitions (Zinnbauer et al. 1997, Hill and Pargament 2003). In this paper, “religiousness” will refer to a person’s relationship to a group of people who believe in a like-minded way, adhere to a common set of beliefs, and share group affiliation and practices. The word itself has been gaining more negative connotations. For example, one hears the statement “science has become a religion for many,” and probably hears a negative connotation. “Spirituality” has many fluctuating definitions. When connected to a religious context, it can express the more personal or intrinsic dimension of the religious life, for example a personal relationship to God, or a set of practices in the personal life aimed at cultivating compassion. In particular traditions, it can refer to specific streams of belief and practice, such as Ignatian spirituality, Franciscan spirituality or particular types of Buddhist practice, that are manifested differently. I have encountered over two hundred different definitions of the word. When the word “spirituality” is taken out of the religious context it can become so vague as to ultimately become meaningless. But it generally points to aspects of personal life that include the transcendent, “more than” what we can see or touch or hear.

Another way of referring to the overlapping circles construct is “religiousness/spirituality.” This phrase was used in the multidimensional measure described above. It has the benefit of referring to the “overlapping circles” and allowing for the fact that this is a multidimensional construct that is still in the process of analysis as instrument development and testing proceeds and language evolves. “Religiousness/spirituality” has been adopted by a variety of groups over time and has proved especially useful in National Institutes of Health contexts. A group gathered together by the Office of Behavioral and Social Research (NIH) in the late 1990’s to develop position papers in this area used religiousness/spirituality in many of the summaries (Miller and Thorsen 2003). It was also useful in the formative stages of the development conferences as the National Institute on Alcoholism prepared its Request for Proposals in this area.
The importance of these issues is highlighted as others interpret research in areas such as religion and health, making sweeping claims such as: “Religion is good for your health.” Specificity about the measures used, using measures in a targeted manner, and clearly defining exactly what each measure contributes will lead to less confusion and better selection of interventions or implementations of practice. This approach has been very helpful in the field of social support measurement and intervention development (Cohen, Underwood and Gottlieb 2000).

References to the DSES in discussions of spiritual and religious variables within the social sciences demonstrate the value of the constructs that the DSES is tapping and the relevance for the general field of study (Keeley 2004, Stuber and Houskamp 2004, Richards et al. 2003, Egbert et al. 2004).

Methodology

Qualitative Research—Approach and Methods

In some ways, the construction of the DSES was like a translation, taking specific ideas from theological and religious texts and reports and from experiences of individuals and putting them into words that were easily understood and able to touch similar experiences in others. People of different religious persuasions, educational levels and cultural contexts needed to find that the instrument’s language elicited in them various experiences of relationship with and awareness of the divine. The goal was to create an instrument that both touched ordinary individuals and could be understood to be valuable and inclusive by investigators in health studies, many of whom were agnostic or atheist. The instrument was designed both to get at breadth of experience found in various religious and spiritual traditions and also assess the depth of that experience.

Increasing attention is being paid to the need for measures of spirituality and/or religiousness that address the psychological experiences of individuals alone and in groups (Emmons and Paloutizian 2003; Hill and Pargament 2003). The Daily Spiritual Experience Scale seems to do that well and has been shown to predict outcomes more effectively than many other measures (Koenig, George and Titus 2004; Koenig et al. 2004; Parker et al. 2003; Zemore and Kaskutus 2004). The DSES also lends itself well to studying change
over time, as variability can be documented. For example, it was used in a daily diary study of pain quite effectively (Keefe et al. 2001), and a study of effects of meditation on pain tolerance (Wachholtz and Pargament 2005).

It is important that this instrument not be called a “measure of spirituality.” As noted, “spirituality” itself has far too many different usages. Any complete operational definition of “spirituality” would need to consider the inclusion of beliefs and practices and other factors. This instrument measures subjective experiences that form an integral part of daily life for many ordinary people. The goal of this instrument was to obtain a measure of the spiritual life as it plays out in the experiential and emotional details of daily life. The experiences tapped by this instrument are feelings and sensations, rather than cognitive awareness of specific beliefs. For many people these experiences may have a highly charged emotional tone, for others, the sensations may seem less specifically emotional, and more like direct sensation. Some of the feelings that the DSES is attempting to capture can be best articulated using religious language; some do not require explicitly religious language. Some feelings or direct sensations are considered more important for particular religious traditions than others. Thus a breadth of particulars was included such as a sense of awe, a sense of thankfulness, feelings of compassionate love, mercy, and desire for divine closeness. It was not expected that everyone would have all of these experiences but it was hoped that the spectrum would cover the variety present.

In the design of the original items in this scale, I tried to identify aspects of the mundane daily felt experience or sense of the spiritual as it can manifest itself throughout life, and used theological works, works in comparative religion, my own experience, and lots of general interviews and reading to construct items. (For more detail on theoretical background see Underwood and Teresi 2002.) I tried the items on myself, colleagues, friends and on people from as many orientations as I could find. I tried to get at what is really true for people, a reporting of experience that is true to what motivates the person to action and is an intrinsic part of internal processes. To do that I used words, sometimes in a way that was more poetic than analytical, which better enabled me to tap the underlying construct. The idea is that the words used in the question elicit memories of feelings and events relevant to the concept or feature of interest. So the draft set of items was built on a set of constructs that were con-
sidered important, and then items were developed to tap those constructs and refined through interviews and feedback. This technique provided content validity, which has been borne out by the subsequent usefulness of the scale.

After constructing a draft set of items, I did a series of structured interviews and convened a focus group using a draft version of the items, in order to specifically address whether the items tapped the intended aspects of spiritual experience. Following evaluation of those, I developed the final form of the instrument.

The first set of interviews was with a population sample from Chicago, collected at Rush Medical School as part of an on-going group for a preventative health study. They included people from a wide variety of religious and non-religious backgrounds, educational levels, and ethnic groups. This was particularly important as I wanted the items to be in a language understandable by all. I had designed them with that in mind, but only by testing could I know for sure. Following these interviews, I needed to fill out the demographics, and to do that I interviewed an additional group in Michigan, ending up with a total of 34 initial interviews.

The second major set of interviews was with Trappist (Cistercian) monks and with a selection of Benedictine monks. I had interviewed the Cistercian monks in an earlier project on the nature of compassionate love and the internal mechanism of its daily expression, and found their insights into motivation and spiritual process quite helpful (Underwood 2005). This set of eighteen interviews provided feedback on the completeness of the set of items and the relative importance of the underlying constructs and was useful for guiding future work and interpretation of results.

I also did some abbreviated interviews (which are not discussed in detail in this paper), including a group of students aged 9–15, a group of college students, and a working group gathered for a World Health Organization (WHO) project on spirituality, religiousness and personal beliefs as a contributor to quality of life. The WHO project included people from eighteen cultures and all major religious traditions and a number of minor ones (Saxena et al. 2002). The DSES items were used as a springboard for discussion and item development for that working group. These interviews and group discussions also provided feedback on language and conceptual clarity in the context of specific religious and cultural approaches not represented in the U.S. sample.
The main interviews were structured as follows. Following a brief introduction to the possible uses of the instrument and the role of these interviews in the development process, the full set of items was administered, plus two additional items at the end: “Do you consider yourself a religious person? Do you consider yourself a spiritual person?”

Then, for each item, each person was asked, “Did you find it easy to understand what was being asked? Were there any particular problems with any of the words or the way the item was stated? What were they?” Each respondent was asked to tell what daily events, thoughts or perceptions he or she considered as he tried to tally the frequency of response. They were also asked to identify what was provoked in terms of particular thoughts, feelings, and incidents, as they tried to answer the question. By asking these questions, the precision of feelings, the detail of experience, and the kinds of environments and events surrounding them were drawn from the people interviewed.

The tone of such interviews was important. There needed to be a respectful attitude towards the experiences of those with whom one might not agree and for experiences one has not had oneself. The interviewer needed to leave lots of space to allow for elaboration. A level of trust needed to be established as the topic and experiences are often very personal. Soliciting disagreements and problems by probing, and welcoming them when presented, were critical to the success of the interviewing for informing instrument development and interpretation.

Particular concerns or questions with particular items had to be addressed. Also, general issues that might indicate potential problems overall were addressed, such as how exactly the substitutional possibility for the word “God” (see discussion of the specific items below) worked for the interviewee. Interviewees were also each asked why they considered themselves a spiritual person, a religious person, or neither. Finally input was sought on whether there were any qualities left out that they thought crucial and whether the ones included were important.

The results presented below give overviews of the interview results from the general populations sample and from the monastics, highlighting particular issues of concern and giving some direct quotes.
Results

The major focus of this paper is on the qualitative interviews involved in the development and testing of the instrument. This will include 1) general issues that emerged in and were resolved by the interviews, and 2) item by item discussion of meaning and wording.

Data from the GSS will be presented to help with overall context and provide an example of distribution in the US population. The GSS has base funding provided by the National Science Foundation. The survey, which is currently conducted every two years and has been in existence since 1972, does an excellent job of drawing on a random sample of the US population, making a good effort to represent the proportion of various religious, ethnic, age, socio-educational and geographic groups as in the US population. All sixteen items were placed in the 2004 GSS, with a sample population for the DSES items of 1329. The distribution of responses and percentages from this is presented in the table. Eight of the items (two in combined format) had been put on the GSS in 1998, with a sample size of respondents of 1145 people. The 2002 sample included the two compassionate love questions added, with responses from 1323 people. It is hoped that this paper will help others in the further analysis of the data from those surveys, which are in the public domain. The broad spectrum of responses on the GSS in past versions and in other studies continues to confirm the lack of skew of these items (Underwood and Teresi 2002), with a nice distribution over response categories, which was reassuring regarding the possibility of social desirability responses and concerns about accessibility of the items.

General issue: “God”

One original challenge was whether and how to use the word “God.” Very often measures in the social science of religion are either explicitly framed in religious language or leave it out altogether. Intentionally in this measure, half of the items included non-God words so that the questions could be accessible also to those who are not comfortable with the word. In the Introduction, subjects are invited to replace the word “God” with some “other word or phrase which constitutes the divine or holy for you.” This proved useful to some people who were not religious or for whom connotations associated with the
word “God” did not point to the divine. For one college student being interviewed, the word “God” meant an old white man on a cloud, and this was not the being she understood herself relating to in the questions, so she preferred to substitute the word “divine.” In an example of a different issue, one woman stated that she was an atheist. Nevertheless, that phrase enabled her to use the word “God” as a place marker for a sense of the divine, which was a real feature in her life as evidenced by her responses to the Daily Spiritual Experience questions, even though she stated that she did not believe in God. The group interviewed included atheists and agnostics in addition to people from various religious groups. The original respondents were not a random sample but by intent included a wide spectrum of religious and spiritual views and personality types and ages.

The only groups for whom the word “God” frequently creates conflict, confusion or other problems are Buddhists and many of the atheists. For those groups, there are a number of non-God items on the scale to which they can respond in a way that captures their spiritual experience. And then they can answer “never” or “almost never” to the God items. But for most people the word “God” is superior to words like “higher power,” “divine,” or “transcendent.” When other words were tested in the place of “God,” the result was that the scores on those items reflected lower frequency of occurrence. When interviewing the various individuals, the word “God” was highly preferred as the mode of capturing the experience of relating to the transcendent. Focus groups addressing this issue among others were conducted with inner city African-American adolescents in an alcohol risk behavior study, and the reply to the use of the term “higher power” in place of God in questions was “Do you mean God, then why not just say it!” from both religious and non-religious youth (Goggin 2003). Ultimately the concept of the divine for most people is ineffable, but rather than being accurate in the abstraction, it is more effective to use a word which may be approximate but is particular enough to elicit experience, and then allow for substitution.

*General issue: Feeling, experiencing*

The word “feel” is used in a number of the items. Although I tried to vary the wording, when I replaced “feel” with “sense” or “experience,” it became less understandable to many. “Sense” is probably the more accurate word in terms of the construct, as the experiences
in the scale do not necessarily have intense emotional valence. In this regard, frequency rather than intensity is a good marker for response categories, as even mild sensations “count” in reporting experiences.

A few of the monks who were interviewed said they would prefer the word “sense” or “experience” to the word “feel.” However, “sense” or “experience” proved to be less accessible to the general population sample, particularly those of lower socio-educational groups. So the compromise in the end was to keep the word “feel.” If the word “experience” was used, given the interview feedback, I would expect that response rates for males might increase slightly, and rates for lower socioeconomic groups and females overall would decrease. However male-female scores are not so different on the GSS results to indicate any dramatic kind of shift. So a compromise word ultimately was one that would appeal to the widest group. And even though a few monks said that they were not so comfortable with the word “feel” in a number of items, they were still able to answer it, by somehow translating that word internally when answering the question.

*Introductory Instructions*

The introductory instructions are key in a number of ways. The introduction needs to be placed prominently and people need time to read it thoroughly, or it needs to be read aloud. The introductory comments are designed to create a relaxed environment, to instill a sense of respect for the respondents’ unique experiences, and to lower the social desirability responses. Thus one point made in the introduction is that these are neutral items that one may or may not experience, and that there are no “right” or “better” answers. The items themselves were constructed to reinforce this quality, and the interviews indicated that it seemed to be conveyed. I asked explicitly whether people felt that some of the answers were more “right” than others, especially in the context of discussing particular questions, and, in general, respondents seemed to feel content with giving answers across the spectrum.

There are no negatively valenced items in the scale. Originally, negative spiritual experience was considered for inclusion. But as particular items were conceived, it seemed that negatively valenced items tapped an orthogonal construct, not the flip of the experiences
mentioned here. In the meetings with the WHO group there was much discussion from those representing cultures in Africa, Asia and South America in particular of the importance of negative spiritual experiences to undermining quality of life, underscoring that one could not just assume that these experiences were positive. However, to look at negative spiritual experiences would be the job of another scale. This scale provides adequate space for people to be comfortable reporting an absence of the spiritual experiences.

**Items: Connection**

1. *I feel God’s presence.* 2. *I feel a connection to all of life.* Connection with the divine or transcendent is important in both Eastern and Western traditions and also in people’s notions of “spirituality” in a more generic way. Two items were particularly selected to address connection. One (“I feel God’s presence”) was expected to tap predominantly theistic ways of seeing daily interactions with the divine. The other item (“I feel a connection to all of life”), although possibly relevant for the theistic group, was designed to particularly tap that sense of connection considered important for Buddhists, Hindus, many indigenous religious groups, and others. Connection was also highlighted in this instrument because of its initial construction for use in health studies. The importance of social relationships in mental and physical health has been confirmed over time (Cohen, Underwood and Gottlieb 2000). Other items in the instrument assess the sense of spiritual support, both practical and emotional.

The interviews confirmed that the item “I feel a connection to all of life” is less frequently reported and less easily understood by those who have a Jewish, Christian, or Muslim religious understanding of their spiritual experience than by atheists or agnostics. Although many people of these religious backgrounds did experience connection frequently, a substantial number found this experience not one they easily related to. A number of interviewees could not easily see how this might be expressed in daily life, but understood what it meant overall. However this item was retained because for a significant subgroup this was very important to their spiritual life, and theoretically it addresses non-monotheistic religious and spiritual perspectives. Words used to describe this experience might include “merging with the infinite, a sense of oneness with all,” but people who had this experience frequently thought the “connection to all
of life” phrase captured it for them. Two people reported this happening in nature, and it was often connected to a belief in interconnectedness and a conscious choice. Items such as this one also increased the appeal of the instrument for those seeking a spirituality measure of some kind that addressed people with a range of beliefs.

In the 2004 GSS, 35% of respondents reported experiencing this from many times a day to most days, and 13% never or almost never. (See the Table for mean scores for various individual items.)

The other item, “I feel God’s presence,” describes connection in more theistic terms. For those who experienced this, the sense was somewhat indescribable. Nevertheless, as can be seen from the GSS 2004 data, 37% of the US population experience this many times a day or most days, so this feeling is not uncommon. On the other hand 22.4% of the population never or almost never experienced this. The permission to substitute some other term for the divine for “God” increases the response to this item. A sample representative description of this item by someone who had this experience was that it was a strong sense of “not being alone, being accompanied.” Another description for this item, by one of the monks, was sensed connection with a “ground of being.” Another person had a sense of a personal being with human qualities somehow there with them. Someone described being tired and waiting for the bus home, and having the experience of “God’s presence, right there, with me, and this happens a lot.”

**Item: Joy, Transcendent sense of self**

3. During worship, or at other times when connecting with God, I feel joy which lifts me out of my daily concerns. This item was aimed at detecting moments of self-transcendence that were spiritual/religious in nature. The goal of the items was to exclude moments of “zoning out” without a religious or spiritual nature. This item uses a specific example of worship, but also taps into experiences of the spiritual-but-not-religious group, as they sometimes reported feeling this connecting with the divine when out in natural settings, and could reply with frequent experiences here. A number of people reported that the spiritual experience of worship—especially singing and speaking aloud, and body movements—can have a strong experiential component, connecting the cognitive belief with spiritual feeling. Even though, in the interviews, most people did not report feeling this during
actual worship services, the example of “worship” placed the sense of “transcending” concerns in a spiritual context. People in the general sample, including the younger age group, felt this during a variety of situations such as prayer, during a walk in nature, singing in church, or in the midst of the ordinary events of the day.

The responses to this item were somewhat different in the monastic interviews. One eighty-year old monk, who had been in charge of practical details of the monastery for many years, said that although he got the point of the question, he didn’t need to be “lifted out” of his daily concerns, but that joy was found in the midst of them, a valid point, particularly given the Benedictine spiritual approach. Also, since the importance of worship is so central to the Trappist and Benedictine communities, one monk felt that this link to joy was too limiting, as there were other much more important qualities that emerged in the worship experience. For example, one felt that the prayers of the community together have more power, and he felt carried by the community in joint worship, and making the bond with others stronger. These observations suggest future items that might be added.

In the 2004 GSS, 44% of the population reported that they experienced this many times a day to most days, and 14.3% report never or almost never experiencing this.

**Items: Strength and Comfort**

4. I feel strength in my religion or spirituality. 5. I feel comfort in my religion or spirituality. Conceptually the experiences of strength and comfort differ. In the interviews, too, the same person often gave examples that showed the differences between these two experiences. Comfort was reported to be associated with a feeling of safety in danger or in a vulnerable situation and a general sense of security. Strength enabled people to be courageous, to step out in difficult situations and do what they would not ordinarily feel confident doing. Comfort examples were experienced during moments ranging from loss of a child to failing an exam. Strength examples included a single mom from the inner city coming home exhausted after a day’s work and being more able to look after her children, or an older workman being willing to confront his boss on an ethical issue despite fear of job loss. The monastic interviews also confirmed the difference between these two experiences. Finally, both items did seem to be a critical part of many people’s daily spiritual experiences.
The original six-item scale included in the Multidimensional Measure used the combination item “I find strength and comfort in my religion.” This item had been found to independently correlate well with mortality following cardiac surgery in a study by Thomas Oxman and others (1995) when tested with other religious and social support variables. The value of this item encouraged the original development of the DSES. When the six-item DSES was first placed on the 1998 GSS, in the context of rapid ad-hoc composition of the Multidimensional Measure, this combination item was used as it helped make the case for the validity of the six-item DSES used in that context. However I do not advocate this combined item because of the distinctive experiences. Adding the phrase “or spirituality” allowed those with a religiously nested spirituality and those who do not place their spirituality in a religious context to respond positively and gave a wider capacity for response as expressed numerically, but also during the interviews. “Spirituality” enabled even those who were quite religious to recall examples more easily and was more inclusive for others. The interviews led me to maintain these as separate items, rather than eliminating one, even though the answers can be highly correlated in research studies of various kinds.

In the 2004 GSS 33.3% experienced strength in their religion or spirituality, and 29.5% comfort many times a day or most days. This was reported as never experienced by 18.8% and 19.4% respectively.

**Item: Peace**

6. *I feel deep inner peace or harmony.* This item was one of those that has increased the appeal of this scale for atheist and Buddhist researchers and those with target populations in these or similar categories. And yet it also can elicit experiences for theistic subjects.

Important in constructing this item was to ascertain whether the item tapped into some feeling beyond mood. I asked people when exactly they felt this, and particularly probed whether it depended on being happy or in a good mood. I asked people if they could feel this when they were anxious, stressed, or worried. This item did seem to represent something different from mood for all of those interviewed, distinguishing the answer to this item from just a feeling of general calm. One woman in particular, who had been repeatedly treated for clinical depression, said that she could have this feeling even when she was very depressed. It just was not as vivid, and took more energy to pay attention to it. One of the monks
commented that “anxiety and peace were not contradictory.” The wording for this item contributes to its effectiveness in this regard. “Deep inner peace” might sound like too many words, but it is just these words that enable the question to touch the right construct. Alternative formats did not work as effectively when tested in interview settings.

On the 2004 GSS, 34.1% reported experiencing this many times a day to most days. 14.7% never experienced this.

Item: Divine help

7. I ask for God’s help in the midst of daily activities. John Cassian (345–445), whose writings helped shape Benedictine spiritual approaches, suggested that throughout the day one should repeatedly use the phrase “Come to my help, O God, hurry to my rescue,” to promote connection to the divine (Luibheid 1985). Ken Pargament, in his studies of religious coping, suggests that the collaborative coping style, where one works together with God, is most productive of psychological well-being (Pargament 1990). This DSES item addresses the component of “social support from God,” as a Jewish agnostic scientist at the National Institute on Aging summed it up. Even atheists may find themselves praying when an airplane they are riding in starts to have trouble, and this shows how discrepancy between belief systems and daily experience might play out here. Some of the people interviewed who responded to this item with “some days” or “once in a while” do not necessarily report believing that help will be forthcoming, but asking for God’s help was a positive experience nevertheless. The collected data indicate that people with a variety of beliefs report some experience of asking for help. The non-religious usage of vernacular phrases such as “God help us” is also interesting in this regard. This item represents something that is understood and acknowledged to occur by a wide range of the general population. Those interviewed reported this in situations varying from driving to dealing with children to work challenges.

One example particularly shows the relevance of this experience, and the dynamic it may reflect that is operating both here and in the next question. A Hispanic woman saw the incorporation of prayer as something akin to the other practical things of daily life. She cited a time when her son had been burned badly, and he wanted to wash off the burned skin. She prayed, asking for God’s help, and
then received guidance that the washing was going to be good for the boy. The dead skin washed off and the skin healed well. She gave this as an example of asking for help, and being guided to act in a particular way. Other examples were usually less dramatic. Asking for help to see the right thing to do in ordinary daily events such as child-rearing and job activities and relationship issues were common themes.

It was interesting to note the high presence of this activity among the monastics even apart from that articulated in ritual form. One monk commented that this worked for him by starting the day with prayer, and then a trusting sense was engaged and followed him throughout the day.

This was frequently reported on the GSS, with 40.5% reporting doing this many times a day to most days. On the other hand, a substantial 22.3% never did this.

Item: Divine guidance

8. I feel guided by God in the midst of daily activities. This item was one way of getting at what might be termed “grace” in the Christian tradition, but by allowing for substitution of an alternative to the word “God” it also proved to be accessible to those who don’t believe in God. The interviews were very interesting in informing the ordinary quality of this experience. One woman in the inner city of Chicago said that it was like being “nudged” by God at various times throughout her day, to do one thing rather than another. This summed up well a large group of the responses. The experiences this item elicited were not generally a response to a guiding principle, but a sense of allowing oneself to be gently encouraged or discouraged.

This question elicited a variety of interesting responses from the monks. One of the monks said, “When my response to a situation which is beyond my capabilities is a creative one . . . pieces come together.” Another monk mentioned the relationship of commandments, conscience, and natural law. Another answered that it was more like trust, and was also expressed in the context of the Christian community in which he lived. Another mentioned how morning prayer set up the expectancy of God’s actions and help throughout the day, which opened his capacity to be aware of that.

On the 2004 GSS, 42.9% reported feeling this many times a day to most days, and 17.4% never or almost never.
Items: Perceptions of divine love

9. *I feel God’s love for me, directly.* 10. *I feel God’s love for me, through others.* The second of these two items was easier to answer positively for those who had no strong religious affiliation or beliefs or who were agnostics or atheists. I started with a single item, “I feel God’s love,” but by the end of the interviews and descriptions, I had separated it into two items. In the responses to this question, I found that some people definitely found it easier to receive God’s love directly, and others found it easier to receive God’s love through others.

One monk responded that it was easier to feel God’s love through others than directly. This was experienced as “support and acceptance.” This varied among the monks. One thought that it was easier to feel love from God directly than through others. And the monks argued for two separate items to discriminate the subtleties of this spiritual experience in daily life. One monastic comment on the experience of God’s love from others was, “Hell would be being alone.” And another said, “Through others—this is the obvious way to experience the spiritual... receiving love from them” and “God can act through people, loving providence.” God’s love from others can even be felt when the person is not present. For example, “I thank my parents every morning for the love they showed me.”

In the general population sample it seemed somewhat more common to feel God’s love through others (40.7% many times a day to most days) than directly (35%). 20.8% reported never feeling God’s love directly, and 15.0% reported never feeling God’s love though others.

Item: Awe

11. *I am spiritually touched by the beauty of creation.* This item was included particularly to capture the sense of awe, and it is one of the items that is universally relevant across religious and non-religious boundaries. The wording as expressed did seem to bring out a sense of transcendence given the feedback from interviews. Adrian van Kaam, in his multi-volume series on spiritual formation, written for those both within and outside of a Judeo-Christian belief system, suggests that awe is the central quality of the spiritual life and that all other aspects flow from it (van Kaam 1986). Awe comes from a realistic picture of the fact that one is not the center of the universe and
from a sense that the universe speaks of the transcendent. This view can have a significant effect on how one approaches life. An example of this might be in dealing with the inevitable hassles of daily life, where an awe-inspired view could prevent catastrophizing. Awe can also be a way of putting more extreme suffering in perspective (Underwood 1999). This item also has the capacity to address the spiritual experience of those not professing religious or theistic beliefs. On the other hand, its construction does not require people to assume that nature and God are one and the same, so it can still address mainstream religious spirituality. Also, the construction of the item, as it was tested in and refined by the interviews, drew out memories of experiences beyond a more superficial enjoyment of being outdoors, or “that’s a nice leaf.” Other comments relative to this item included: “Being in the park and forgetting about myself for a while”; “when my baby daughter was born, I was transported, and had a sense of a bigger meaning than I had understood before” (from a father); “when I am working outside, and look up and see light in the sky through the clouds, I realize more what matters.” One person mentioned watching horses move and feeling moved inside by their motion in a way that felt like grace.

The 2004 GSS results showed that 25.7% reported this many times a day to most days, and 20.3% never or almost never.

Item: Thankfulness, appreciation

12. I feel thankful for my blessings. This item builds on gratefulness as a central feature in many religious traditions and in the spiritual life. The Psalms are full of an awareness of gratitude. And this orientation was expressed by one of the interviewed people as “life is a gift rather than something owed to me, and this can affect how I approach things as they emerge throughout the day—it comes out as thankfulness.” Other comments included: “As the day moves along, I make an effort to think of the things I am glad of in my life, and when I do that I find a lot more of them”; “when I say a blessing before meals, I find myself thinking of all the things to be thankful for, it’s as if I experience them again, and in a new way, and see things I had not noticed as they happened.” One of the monastics said, “When things go well, I acknowledge God’s role in this and am grateful.” The monastic set recitation of the Psalms throughout the day are full of acknowledgement of blessings.
This item also gets at the notion of generally saying yes to life. The interviews confirmed that blessings can be seen in both the good events and those that seem bad on the surface. It was interesting that the words “thankful” and “blessing” were able to tap the experience of non-theists quite well.

The item was also able to identify a significant group for whom this experience was not present at all, 30.9% in 2004. This is one of the items of the scale that seems to take more internal mental effort than some of the others. In the U.S. population surveys it is one of the least frequently reported items, with the 2004 GSS results showing that only 11.2 of the population reported this many times a day to most days. The mean score of 4.88 (sd 1.11) was the highest, indicating the lowest average experience.

**Items: Compassionate love**

The next two items together assess the construct of compassionate love. Originally I labeled them the “compassion item” and the “mercy item.” They have been separated off from the instrument as a whole and used in a variety of studies designed to examine altruistic attitudes and motives with a spiritual impetus and have proved helpful in that regard. These two items were also placed on the GSS in 2002, together with a set of items on empathy and altruistic behaviors.

13. *I feel a selfish caring for others.* Compassion emerges in many spiritual traditions as a central component in the spiritual life. This item applies across religious traditions and to the non-religious. The interviews on this item were particularly helpful. I started out with the items in two versions. The first was phrased “I care for others without expecting anything in return,” and the second as stated above. There were two particular things I wanted to avoid, and needed the interviews to help. I was concerned that the “not expecting anything in return” item might convey an attitude of martyrdom in an unhealthy way—a cynical view of others’ capacities. This did come out in the interviews, and this is why I ultimately chose the selfish caring item. The other concern I had was with the word “selfless.” First, was it easily understood, and, secondly, did it portray a total self-abnegation, which I did not wish to convey. The goal of the item was to identify times in daily life when caring for the other was centered on the other, rather than being done for primarily selfish reasons. I was pleasantly surprised by how well this
item got at those moments. The interviewees talked about times when caring was done to look good, or because you were being paid for it, and those didn’t really “count” in the tally of frequency. Examples were given of doing something for a child when exhausted, or buying groceries for a sick neighbor, or helping someone when you did not initially want the person to succeed. When asking people whether they lost themselves in the act, they usually said no, but that the other person was at the center of the action, and self was set aside. Using the word “selfless” as an adjective for caring enabled those interviewed to locate the caring appropriately. When I asked specifically in this regard, did you think that this means you cannot think at all about your own welfare in the midst of selfless caring, no one stated that they had to be completely selfless.

The monastic insight into the dynamics of this concept was particularly illuminating. The item did sum up the concept well for them. If anything, the monks were perhaps more critical of their motives than some people in the general population sample. “There are times during the day that I don’t but I should,” said one of the monks. “When I am feeling useless, it can indicate selfishness,” another said. “If I am not acting with the same amount of respect for each person it signals to me that I am not being selflessly caring.” One mentioned helping out another monk that he didn’t particularly like. One mentioned that it was the opposite of selfish.

In the 2004 GSS sample 29% reported this many times a day to most days, and 14.1% never or almost never.

14. I accept others even when they do things I think are wrong. The second item of the pair of compassionate love questions addresses the concept of mercy. The underlying attitude that this question tried to address was that of giving the benefit of the doubt, of dealing with others’ faults in the light of one’s own: mercy and acceptance. This item addresses the felt sense of mercy, rather than the mere cognitive awareness that mercy may or may not be a good quality. Mercy, as presented in this item, is closely linked to forgiveness, yet is a deeper experience than isolated acts of forgiveness. Fruitful links with measures of forgiveness might be explored in future work, exploring reciprocal interactions.

Another thing that came out of the interviews was the un-valenced aspect of this question. I did not want to signal that there was a “right” answer, which encourages social desirability effects, which can be especially strong for religious measures. On this item, those
who said they never did it, felt not doing it was “right” and justified. “Of course I don’t accept others when they do things I think are wrong—they don’t deserve it.” Those who did it a lot thought it was “right” to do this. In the interviews overall it seemed easy for most people to identify moments when people did things thought to be wrong. In the monastic interviews one monk said, “People are foolish and stupid, and it is so important to accept them anyway.” “My own awareness of my own failings really helps me have this experience,” said another. And, “Self-knowledge helps me not to judge others.”

The 2004 GSS data shows 27.3% reporting this many times a day to most days in 2004. On the other hand this item had the lowest percentage of those reporting the “never” category, 10.7%.

**Items: Union and closeness**

15. *I desire to be closer to God or in union with the divine.* 16. *In general, how close do you feel to God?* This pair of items express frequency of the experience of desire for the divine and sense of closeness. At the end of the interviews I always asked, “Is there anything I have left out any daily sensations, experiences or feelings relating to your spirituality or religiousness?” The last two items were added after the interviews with the group in Chicago, based on an expressed need to capture a longing for an interaction with or relationship to the divine, especially when that sense of closeness was not there. This issue was raised originally by agnostics. The original form of the item developed at this time was: “I desire to be closer to God or in union with Him.” This original wording was changed after further consideration and feedback from the remaining population sample and the monks, to “in union with the divine,” removing the specific pronoun and inserting the divine to capture a wider breadth of response.

The 2004 GSS results showed that 33.9% report this many times a day or most days, and 18.2% never or almost never.

The “How close do you feel” item was also added in conjunction with the “desire” item because longing for closeness did not map directly onto the actual feeling of closeness or distance. In interviews, some people wanted to be close a lot and felt very close; however, others wanted to be close, but felt very distant. A few did not desire to be close because they felt they were as close as they could get. I
personally felt ambivalent about this last item, and it complicates the scoring (see below), so I was inclined to drop it. But feedback encouraged me to retain it. In the interviews with the monks, one said, in response to the desire for closeness item, “This is primary to a monk, it is the question for a monk. . . .” Another heartily agreed that this was the key question. While the item was added for agnostics, it ended up being central for these Christian monks. An agnostic female scientist indicated that this question captured something very important to her spiritual experience, a felt longing for a relationship of intimacy with God, even though she no longer believed in God.

Additional comments on the experience of closeness to God came in the monastic interviews. Two monks expressed that closeness was not a feeling thing but a will thing. One of the monks said, “The more we go to the presence of God in contemplation . . . the more of God we see in daily life.” Another said, “God has no grandchildren . . . we are all children . . . close and direct.” Further work on the relationships between these two items would be worth pursuing in future data analyses of both existing data sets and new ones.

In the 2004 GSS, 17% express that they feel as close a possible to the divine, and 10.2% report feeling not at all close. Individual differences in degree of correlation between these two items might be fruitful to explore in the future.

Additional experiences

There were two concepts with associated items that were in the list originally, but none of the questions devised seemed to tap the relevant concepts in the general population sample interviews. They were dropped from the set of items following the interviews. The first concept was that of being fully present in the moment, rather than continually reflecting on memories or worrying about or planning for the future, and therefore being distracted from living life more fully each moment. The devised items were either too hard to understand for the average person or missed the concept for many. Wordings explored included as “I live fully in the moment,” or “I am fully present to life, not focused on the past or future.” The interviews showed that these items just did not tap the construct. They could refer to lack of planning or foresight and spontaneous attitudes, which was not the goal of the item. This is still an important experience, dealing with the “mindfulness” that is encouraged
by Buddhism, and also a focused presence that is raised by a variety of other religious traditions, and might be worth exploring in the future (de Caussade 1982, Hanh 1994).

The other concept was that of integration of the spiritual with physical and mental aspects of life. It looks at issues of actions and beliefs working together, but also addressing the Eastern Orthodox concept of “putting the mind in the heart, and acting from that through the day” (Kadloubovsky 1992). A variety of items on this were used in the WHO scale mentioned earlier, based on the importance of this in Hindu beliefs. The main item tested in this regard for the DSES was, “My spirit, mind and body work together well.” This was just too abstract for this measure, and interviews did not give a sense that there was a common experience which this reflected as people tried to answer it. Nevertheless, it may be possible to also investigate this further in the future.

A third concept that would be worth exploring is the notion of detachment. Again, a satisfactory item was not found that tapped the particularly spiritual nature of this kind of experience such that it would address ordinary experiences of this kind. “I have a sense of observing myself thinking or acting, without being emotionally involved, and able to make fair judgments of those thoughts and actions to inform myself in the future.” This, like the living in the present item, has capacity for interpretation in a number of ways, some of which are not relevant to spiritual experience, and the an item did not emerge. However in the future an item on this could be worth working on. Support for adding these additional three concepts came primarily from the interviews with those from world religions in the WHO context, rather than from the questioning of the general populations sample or monastics.

Response categories

The response categories for the items were a modified Likert scale (Many times a day, Every day, Most days, Some days, Once in a while, Never or almost never). The reason for this was to get the one answering the question to try to find specific moments in which they had this feeling or experience and be concrete in answering the questions, and to have the alternatives finely tuned enough so that subjects would have to think specifically. A variety of different response categories were tried out. Feedback on the frequency distributions
generally mentioned that respondents could easily find an answer that fit their experience, and the variety of possible responses helped people to think clearly about the past, getting specific, which helped to clarify the presence or absence of experiences. One critique of the response categories from a few of the older monks was that the frequency response did not fit their experience, and they had to stretch to find an appropriate response category. For many items their experience was more of an abiding, constant sense, with peaks and troughs. The individual experiences were less isolated and recognized as such, and blended together into a flow of life of which they were a part. For example, with the inner peace question, one monk mentioned it as “abiding,” as a mainstay of life. This notion of “abiding” emerged in interviews with others. One older monk said the same to the “spiritually touched by the beauty of creation” question. As he got older, he had fewer “peak experiences”: “My life is less segmented.” One responded to the strength and comfort items, “I no longer need to become aware of these things as much.” This may be more the case for those in a more mature stage of the spiritual life. As in a number of other areas, I had to pick a compromise position, going with the frequency response in the end. Future work may want to explore the option of a continuous experience response further, but the utility of the instrument in its present form suggests that it works well as is.

The item, “In general, how close do you feel to God?” item has a different response set. (1 = not at all, somewhat close, very close, 4 = as close as possible.) Trying to stretch this such that it had a six item total was confusing for respondents, so I finally settled on these four possible responses which captured the variability most effectively for this item.

Religiousness and Spirituality questions

In the interviews I also included in the general population sample the two questions “How religious are you?” and “How spiritual are you?” And although this was not the focus of the interviews and is not a question on the DSES, the responses to those items together with the answers to the other questions gave additional insight into what people see those words as addressing in their own lives. One finding is that there is a lot of variability in meaning for the general population sample, and these terms do not necessarily have meanings
that correspond to those of most theologians or social scientists of
religion. One quite representative example was of a woman who
said that she was not religious, but she was spiritual. We all may
have our own ideas of what this means. However, her language
throughout the interviews on the other questions referred to Mary,
the saints, and Christ. In response to my questions about what caused
her to answer the way she did, she said that she did not go to mass
every day, and therefore she was not religious. From the outside, if
one was categorizing this woman, given the definitions I used pre-
viously, one would call her religious and spiritual. For many, the
“how religious” question addressed something with a negative con-
notation, whereas the “how spiritual” question was given a positive
valence, describing both individual practices and feelings and reli-
gious sensibilities. Given these issues, the DSES can aid us in indi-
rectly getting an answer to this question of how people feel and
perceive their spirituality in daily life, how it operates, and together
with other measures, can get a more accurate picture than from
directly asking “How spiritual are you?” and “How religious are you?”

Scoring Considerations

The practical details of scoring the DSES build on the conceptual
issues discussed here. Detailed scoring instructions have not been
previously provided in published work although scoring recommen-
dations have been provided to individuals involved in various stud-
ies. The following suggestions for scoring can enable comparison of
various data sets using this scale, and especially comparison with the
data in the original paper. As further work is done on the instru-
ment and data from the 2004 GSS and other studies are analyzed,
more input will be available to aid in interpretation.

To start with, at a purely practical level, the raw score for item
16 needs to be adjusted. It is reverse scored, so to agree with the
directionality, the raw score should be reversed. Also the numerical
scale for item 16 is a four-point Likert, and this can be handled in
a variety of ways. Since it is only one item, this is not a critical issue.
If a total score is being used, the four-point score can just be added
in to the total after reverse scoring. If a mean total score is used, it
may be useful to spread the four points over a six-point spectrum,
and then average it into the total for the resulting mean total.
Total score is one way to score the entire scale, and was one scoring method used in the original paper. A frequently more useful method, also used in the original paper, is a mean score for the entire scale. One of the reasons for using the mean score for the entire DSES is that one can also look at individual items, or subgroups of items, and take that mean score of the item or subgroup and compare it with the mean score for the entire scale. So, for example, taking a mean score for the “selfless caring for others” item and comparing that with mean score on the subset of other non-God items for an atheist subpopulation would be possible. The mean score approach enables this well. Mean scores enable subgrouping of items into sections that might be analyzed differently in different population groups. Another value of using mean scores is that one can compare the results on specific items, or two items, e.g. feeling divine love directly or through others, and examine correlations and differences that might give further insight into the nature of the constructs. For example, it might be worth exploring the hypothesis that varying responses to those two questions may depend on attachment styles, or various other social relationship variables.

Although some social scientists are disdainful of single item scales, others in practical applications have strongly supported such scales for such varied and multidimensional constructs as quality of life (Feinstein 1985, Gorsuch and McFarland 1972). On the one hand, the DSES has a set of items that support one another. But also the distinctiveness of individual items as they address particular features can allow one to hone in on particular aspects of spiritual experience as they vary from person to person. For example, it might be interesting just to look at the “spiritually touched by beauty” item alone and look at change over time. If certain single items prove to be predictive and useful, for those who prefer the multi-item approach, additional items might be added to create subdomains of measurement in the future.

Although mean scoring is appealing overall, for some analyses it might be useful to examine extreme subgroups. For example the group that responds “many times a day” to items may have particular qualities that are interestingly different from the group that answers “never or almost never.”

To date, analyzing the responses as a continuous variable has been easier and has proven useful (Tower and Lobi 2004). In the original paper on the scale (Underwood and Teresi 2002), the variables
were analyzed additionally as a dichotomized variable (never, once in a while, and some days vs. many days, every day and many times a day), and the internal consistency of the scale remained high (.93) when this was done. Although not ideal, this indicated that it provides another way to do analysis of the results that might be helpful in some situations.

Some studies have divided the scale into “God-items” and “non-God-items” (referred to as “Theistic” and “Self-Transcendent” in one study, Zemore and Kaskutus 2004). This may be a useful subdivision, and may work particularly well for certain kinds of populations. However there are significant overlaps, as one can see looking at the qualitative and conceptual development. In the original paper, exploratory factor analysis showed that all the items loaded on one factor, with the two compassionate love items loading less strongly. The fact that there is a high Chronbach’s alpha for this scale supports the notion that this scale measures a group of experiences that appear frequently in life for many kinds of people. For people who articulate their spiritual experience in theistic religious terms, there are lots of items to which they can reply strongly and affirmatively—most of the items, in fact. But findings from the interviews and the GSS also show that the items can be used for people who do not profess theistic beliefs or have those organizational religious affiliations. It seems that for many, translation from the word “God” as perhaps often misunderstood and narrowly conceived can take place in the context of answering the questions. This scale affirms the value of not watering down the concept of spirituality by discarding religious terms, but leaving space for spirituality that is religiously grounded and framed, as well as that which may not be. Factor analysis of 2004 GSS data and other studies could shed further light on these issues.

**Direction of scoring.** The original items were developed to have the same scale direction as the entire Multidimensional Measure. Thus the original scores were reverse scored, with higher numbers indicating less spiritual experience. This is, however, counterintuituitive, and in reporting the results of studies, investigators may want to change the scoring direction so that in discussing the results, higher score represents more frequent experience. If this is done in the reporting, the transformation algorithm should be given so that comparison with data using the original scoring method, such as the GSS results, can be made.
Stability. One outstanding question that needs full exploration is whether the DSES is stable or changes over time. Is it primarily a state or a trait? The DSES was effectively used in two longitudinal study of pain and provided a good measure of change over time (Keefe et al. 2001, Wachholtz and Pargament 2005). And it has been used in other studies as a measure of change. There may be a more stable range, but variability within that range can express change. In the monastic interviews, the abbot of the monastery commented that he suspected that the DSES score would be reasonably constant in the short run in the monks, but would change over the long haul, as the monks became more secure. It would be interesting to follow up on this in the general population, and see what kinds of changes might take place over the long term, as well as the cohort and age effects that might emerge in cross-sectional age comparisons. It will also be interesting to track the impact of key experiences, and various lifestyles and interventions.

Short form/long form issues. The six item version of the instrument that is currently part of the Multidimensional Measure is not the best form of the instrument, since it was developed ad hoc, and not as the best selection of items using conceptual and psychometric criteria. The double-barreled nature of two of the items, and the alternative wording of the strength and comfort item are not the best choice for use. Using the now extensive 2004 GSS data, a preferable short form could be developed. However, it seems premature at this time to eliminate the subtle distinctions and develop an official short form. If one needs a shortened form, I would suggest looking at the items and the descriptions in published works on it, including this paper, and deciding on a set for inclusion based on theoretical and empirical considerations given the hypothesis of interest.

Translations

The full-length DSES has been translated to date into Spanish, Korean, Hebrew, French and Vietnamese (Tower and Lobi 2004; see also http://www.dsescale.org). Translations should take into account the background provided in this article. They should also obtain input from people who frequently have the experiences and speak the translation language. This also applies to the introductory section and the substitution words for “God.” Translators should get
input from those who are religiously grounded and also from those who are not connected to a religious belief system, to enable the instrument to stretch. This is important, for example, for items such as “I feel a connection to all of life,” as one decides on words for “life” and for “connection.” For example, one needs to avoid a translation that ends up meaning “I am linked to other life-forms,” which carries a very different tone, and will not elicit the experiences of interest. This same care needs to be taken especially with words such as “spirituality,” “religiousness,” “joy,” “life,” “feel” or “sense,” and “blessing.” Information from the interviews can be very helpful in developing translations. The words for translation always should fit the underlying meaning rather than duplicate the words. During the back-translations this can be checked, refinements substituted and re-tested. For example, the Spanish translation of the item “I am spiritually touched by the beauty of creation” was finally translated “La belleza de la creación me mueve espiritualmente.” This phrase literally translates as “The beauty of creation moves me spiritually,” but that phrasing captured the meaning well. The ideal for translations is to use an abbreviated form of the original set of interview questions to confirm that the meanings and connotations of the items and the introductory remarks are maintained. Particular care needs to be given to groups of words that convey the underlying sense of connection to the “more than.” Once preliminary items are constructed, give the instrument to a variety of individuals in the new language, and do appropriate back-translations to validate meaning.

Conclusions

Given the plethora of scales in the field of religiousness/spirituality research, why is this scale worth serious attention? The full DSES complements other scales and can be usefully combined with scales of attendance, affiliation, coping, and private and public practice to flesh out a larger construct of religiousness/spirituality. It was originally developed in the context of a multidimensional measure that has provided a common scale used in many studies of physical and mental health, so is an integral part of these. A multidimensional measure including a six-item form of the DSES is regularly put on NIH project applications looking at spiritual and religious factors and is becoming part of an extended database of comparable information.
Often the full DSES is additionally included in these studies. The DSES is more acceptable than many scales to non-religious researchers partly due to the substantive section of non-explicitly religious questions. On the other hand, many religiously oriented researchers see that orientation also reflected. It is being used in over fifty studies to date including a NIH-funded cardiovascular health study, a longitudinal study of health in women, alcoholism studies, and eight large end of life studies, and a number of web studies of relationship and health. It is a popular scale for graduate student research. There are US population data norms for the entire scale and for the revised set of six items. It deals with both spirituality and religiousness and some practical expressions of both, without requiring exclusive separation of the constructs. Links have been established between the DSES and health and mental health outcomes (Fowler & Hill 2004; Koenig, George and Titus 2004; Koenig et al. 2004; Ciarrocchi and Deneke 2004; Keeley 2004; Parker et al. 2003, Keefe 2001, Wachholtz and Pargament 2005, Holland and Neimeyer, 2005). The items tap a particular set of constructs and the validity of that has been tested qualitatively. The concreteness of the items facilitate recall and accurate self-report.

Much of the work using this scale is not yet completed or published. One of the particular uses of the scale has been as a measure of change over time, before and after an intervention. Currently it is being used with a web-based spiritual intervention aimed in particular at developing the kinds of experiences included in the scale directly. It has been used to assess the impact of a video intervention in chronic disease at Johns Hopkins, a holistic health intervention (Lawson and Horneff 2002), as a class assessment for a Religion and Literature class, and in an alcoholism intervention (Hart and Shapiro 2002). In India, the instrument is being used in a study of spirituality and the caring capacity of health care organizations. It has been particularly useful in a series of eight large ongoing studies of end of life, and in the field of addictions research.

A number of studies using the multidimensional measure have found the DSES items to be one of the more predictive subscales of that larger instrument in studies of epilepsy, inner city elders, adolescents, and substance abuse (Hayton 2002, Dunn 2004, Pearce 2003). The scale has provided conceptual grounding for other work (Richards et al. 2003; Doswell, Kouyate and Taylor 2003). It has been tested in a cross-cultural context in Hawaiians and found to
be useful (Mokuau, Hishinuma and Nishimura 2001), and use in cross cultural studies in Koreans, Vietnamese, and French populations and others indicate utility of the instrument in these populations (Tower and Lobi 2004).

One of the strengths of using social science tools is that it helps us to better understand those who are not like ourselves. This has definitely been the case for medical and social science researchers, for whom spiritual experience sometimes has little place in their lives or who have a particular articulation of that experience. This scale and its results help them not to extrapolate that orientation to others. It also has alerted medical researchers to the role religiousness/spirituality plays in the lives of many different kinds of people and how it may operate in daily life for many. The utility of this instrument is linked to its development, as building this instrument with a strong qualitative verification phase helped significantly in linking the measure to the constructs of interest. The details of this background can be useful in subsequent interpretation and research. The method of drawing out meaning of items in interviewing added in a bottom-up approach that added to the value of this instrument.

Work using this scale has potential to continue to inform us about the nature of these experiences, and insight into various aspects of the spiritual and religious life and its development. It also has the potential to continue to inform us about how ordinary spiritual experience and mental and physical health and well-being interact with one another.
<table>
<thead>
<tr>
<th>Item</th>
<th>Many times a day 1</th>
<th>Every day 2</th>
<th>Most days 3</th>
<th>Some days 4</th>
<th>Once in a while 5</th>
<th>Never/almost never 6</th>
<th>Mean</th>
<th>s.d.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. God's presence</td>
<td>161 (12.3)</td>
<td>173 (13.3)</td>
<td>151 (11.6)</td>
<td>179 (13.8)</td>
<td>347 (26.6)</td>
<td>292 (22.4)</td>
<td>3.96</td>
<td>1.71</td>
</tr>
<tr>
<td>2. Connect all</td>
<td>102 (8.1)</td>
<td>168 (13.3)</td>
<td>175 (13.9)</td>
<td>287 (22.7)</td>
<td>368 (29.1)</td>
<td>165 (13.0)</td>
<td>3.91</td>
<td>1.48</td>
</tr>
<tr>
<td>3. Joy lifts</td>
<td>186 (14.3)</td>
<td>200 (15.3)</td>
<td>197 (15.2)</td>
<td>272 (20.9)</td>
<td>261 (20.1)</td>
<td>186 (14.3)</td>
<td>3.60</td>
<td>1.63</td>
</tr>
<tr>
<td>4. Strength in R/S</td>
<td>152 (11.6)</td>
<td>147 (11.2)</td>
<td>138 (10.5)</td>
<td>233 (17.8)</td>
<td>393 (30.1)</td>
<td>246 (18.8)</td>
<td>4.00</td>
<td>1.63</td>
</tr>
<tr>
<td>5. Comfort in R/S</td>
<td>128 (9.8)</td>
<td>143 (10.9)</td>
<td>117 (9.0)</td>
<td>238 (18.2)</td>
<td>427 (32.7)</td>
<td>254 (19.4)</td>
<td>4.11</td>
<td>1.58</td>
</tr>
<tr>
<td>6. Deep inner peace</td>
<td>94 (7.2)</td>
<td>129 (9.9)</td>
<td>224 (17.0)</td>
<td>335 (25.5)</td>
<td>338 (25.8)</td>
<td>192 (14.7)</td>
<td>3.97</td>
<td>1.43</td>
</tr>
<tr>
<td>7. Ask God's help</td>
<td>175 (13.4)</td>
<td>161 (12.3)</td>
<td>194 (14.8)</td>
<td>170 (13.0)</td>
<td>317 (24.2)</td>
<td>292 (22.3)</td>
<td>3.89</td>
<td>1.72</td>
</tr>
<tr>
<td>8. Guided by God</td>
<td>206 (15.7)</td>
<td>176 (13.4)</td>
<td>180 (13.8)</td>
<td>177 (13.5)</td>
<td>343 (26.2)</td>
<td>223 (17.4)</td>
<td>3.73</td>
<td>1.73</td>
</tr>
<tr>
<td>9. Feel love directly</td>
<td>191 (14.6)</td>
<td>144 (11.0)</td>
<td>124 (9.5)</td>
<td>185 (14.0)</td>
<td>393 (30.0)</td>
<td>272 (20.8)</td>
<td>3.96</td>
<td>1.73</td>
</tr>
<tr>
<td>10. Feel love others</td>
<td>164 (12.6)</td>
<td>144 (11.1)</td>
<td>221 (17)</td>
<td>270 (20.8)</td>
<td>305 (23.5)</td>
<td>195 (15.0)</td>
<td>3.76</td>
<td>1.59</td>
</tr>
<tr>
<td>11. Spir touched by beauty</td>
<td>77 (5.9)</td>
<td>102 (7.8)</td>
<td>156 (12.0)</td>
<td>251 (19.2)</td>
<td>456 (34.8)</td>
<td>266 (20.3)</td>
<td>4.30</td>
<td>1.43</td>
</tr>
<tr>
<td>12. Thankful for blessings</td>
<td>25 (1.9)</td>
<td>29 (2.2)</td>
<td>94 (7.1)</td>
<td>186 (14.2)</td>
<td>573 (43.7)</td>
<td>406 (30.9)</td>
<td>4.88</td>
<td>1.11</td>
</tr>
<tr>
<td>13. Selfless caring</td>
<td>50 (3.8)</td>
<td>100 (7.7)</td>
<td>229 (17.6)</td>
<td>338 (26.1)</td>
<td>398 (30.7)</td>
<td>183 (14.1)</td>
<td>4.14</td>
<td>1.30</td>
</tr>
<tr>
<td>14. Accept others</td>
<td>20 (1.5)</td>
<td>123 (9.4)</td>
<td>214 (16.4)</td>
<td>452 (34.6)</td>
<td>360 (27.5)</td>
<td>140 (10.7)</td>
<td>4.09</td>
<td>1.17</td>
</tr>
<tr>
<td>15. Desire divine</td>
<td>130 (10)</td>
<td>136 (10.5)</td>
<td>175 (13.4)</td>
<td>183 (14.0)</td>
<td>441 (33.9)</td>
<td>237 (18.2)</td>
<td>4.06</td>
<td>1.59</td>
</tr>
<tr>
<td>16. How close?</td>
<td>134 (10.2)</td>
<td>484 (37.0)</td>
<td>469 (35.8)</td>
<td>222 (17.0)</td>
<td></td>
<td></td>
<td>2.60</td>
<td>0.89</td>
</tr>
</tbody>
</table>

Table GSS data 2005, (Davis, Smith and Marsden 2005) Percentages of total respondents to the items are in parentheses. 
Means are weighted averages, s.d. = standard deviation.
“The list that follows includes items you may or may not experience. Please consider how often you directly have this experience, and try to disregard whether you feel you should or should not have these experiences. A number of items use the word ‘God.’ If this word is not a comfortable one for you, please substitute another word which calls to mind the divine or holy for you.”

<table>
<thead>
<tr>
<th>Item</th>
<th>Many times a day</th>
<th>Every day</th>
<th>Most days</th>
<th>Some days</th>
<th>Once in a while</th>
<th>Never or almost never</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel God’s presence.</td>
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</tr>
<tr>
<td>I experience a connection to all of life.</td>
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<tr>
<td>During worship, or at other times when connecting with God, I feel joy which lifts me out of my daily concerns.</td>
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<td></td>
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<tr>
<td>I find strength in my religion or spirituality.</td>
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<tr>
<td>I find comfort in my religion or spirituality.</td>
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</tr>
<tr>
<td>I feel deep inner peace or harmony.</td>
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</tr>
<tr>
<td>I ask for God’s help in the midst of daily activities.</td>
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<tr>
<td>I feel guided by God in the midst of daily activities.</td>
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<tr>
<td>I feel God’s love for me, directly.</td>
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</tr>
<tr>
<td>I feel God’s love for me, through others.</td>
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<td></td>
</tr>
<tr>
<td>I am spiritually touched by the beauty of creation.</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>I feel thankful for my blessings.</td>
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<td></td>
</tr>
<tr>
<td>I feel a selfless caring for others.</td>
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<td></td>
<td></td>
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<tr>
<td>I accept others even when they do things I think are wrong.</td>
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</tr>
<tr>
<td>I desire to be closer to God or in union with the divine.</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Not at all</th>
<th>Somewhat close</th>
<th>Very close</th>
<th>As close as possible</th>
</tr>
</thead>
<tbody>
<tr>
<td>In general, how close do you feel to God?</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Las siguientes preguntas incluyen puntos o asuntos que usted puede o no tener experiencia con ellos. **Por favor considere si y cuán a menudo tiene estas experiencias, y trate de pasar por alto si usted siente que debería o no debería tener estas experiencias.**

Algunas declaraciones utilizan el término Dios. Si esta no es una palabra con la que usted se siente cómodo(a), por favor sustitúyala con cualquier otra idea que traiga a su mente lo que es divino o santo para usted.

<table>
<thead>
<tr>
<th>pregunta</th>
<th>Muchas veces al día</th>
<th>Todos los días</th>
<th>La mayoría de los días</th>
<th>Algunos días</th>
<th>De vez en cuando</th>
<th>Nunca o casi nunca</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Encuentro mi fortaleza en mi religión o creencias espirituales</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
</tr>
<tr>
<td>• Siento gran paz interior o armonía</td>
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</tr>
<tr>
<td>• Siento el amor que Dios me tiene, directamente</td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• La belleza de la creación me mueve espiritualmente</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>• Siento la presencia de Dios</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>• Siento una conexión con todo lo que es vida</td>
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<td></td>
</tr>
<tr>
<td>• Mientras estoy adorando, o en otros momentos cuando me conecto con Dios, siento una felicidad o júbilo que me levanta de mis preocupaciones diarias</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Encuentro consuelo en mi religión o espiritualidad</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Le pido ayuda a Dios en medio de mis actividades diarias</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>• Me siento guiado(a) por Dios en medio de mis actividades diarias</td>
<td></td>
<td></td>
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<td>• Siento el amor que Dios tiene por mí a través de otros</td>
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<td>• Me siento agradecido(a) por mis bendiciones</td>
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<td>• Siento cariño desinteresado por otros</td>
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<td>• Acepto a otros aún cuando hacen cosas que pienso que están mal</td>
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<td>• Deseo estar más cercano(a) a Dios o en unión con Dios</td>
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¿En general, cuán cercano(a) se siente usted a Dios?
- o Para nada cercano(a)
- o Algo cercano(a)
- o Muy cercano(a)
- o Tan cercano(a) como es posible


THE MARRIAGE BETWEEN EGO AND ID: COGNITIVE INTEGRATION AND ITS RELATION TO MYSTICAL EXPERIENCE

Antoon Geels

ABSTRACT

The author suggests a new model for interpretation of mystical experience, based on a fruitful combination of cognitive psychology and depth psychology. Offering a rather wide definition of mystical experience, the author then turns to two basic assumptions—a general systems approach and an organismic-holistic view of development. Hans Loewald’s analysis of primary process cognition is combined with a multi-dimensional model of cognitive activity called “Interacting Cognitive Subsystems” (ICS), presented by John D. Teasdale and Philip J. Barnard. These two complementary theoretical perspectives are applied to the analysis of both historical and contemporary examples of mystical experience, understood as a result of a dialectical interplay between these different coding systems, or the marriage between Ego and Id.

A twenty-one year old Swiss medical student wrote in his diary that his greatest current anxiety stems from “suddenly having discovered that the foundation of personality is a nothing, that the human soul is simply compounded of feelings and thoughts, and what I sought beyond this does not exist at all.” The day after, he again mentioned this transforming experience, stating that the “I” he had tried to bring into ever greater awareness within himself is an illusion. There is no such “I” at all, he continues, “This too is only a concept, a form, which comes to be taken for granted by us through habituation. I recognized that the soul or the ‘I’ consists of the states, feelings, and thoughts that variously move us, and that its content is nothing permanent or lasting.” Later in life, when working as a psychiatrist at the Lifwynn Foundation in Westport, Connecticut, he was persuaded to publish his diaries in English (Syz, 1981).

When reading this diary I had two spontaneous reactions. First of all, you cannot help noticing that the experience of Hans Syz reflects the central Buddhist experience of anatta, no-self, i.e. the idea that the self is a construction and that there is nothing permanent
at its foundation. The second reflection was that this experience might be universal, but is differently interpreted.

My second introductory example of a mystical experience is the Swedish shoemaker and mystic Hjalmar Ekström (1885–1962), the subject of my doctoral thesis (Geels, 1980). The basic data for this thesis consists of about five thousand pages of hand-written letters. In his letters, Ekström sometimes describes the mystical experience, usually as answers to questions asked by the roughly twenty people he corresponded with. It is obvious that his choice of words is influenced primarily by his consideration to the life situation of the addressee. Compare the following two quotations. The first one is written to a handicapped woman, living alone in a small room in central Stockholm, hardly meeting any people. The second quote, written the very same day, was included in a letter to the eccentric Swedish linguistic genius Eric Hermelin, who spent about thirty-five years in a mental hospital in Lund because his aristocratic family did not know how to handle his alcoholism. In time he developed a manic-depressive disorder. During his manic phases he translated a significant part of Persian Sufism, filling almost one meter on a bookshelf. Ekström corresponded with him for about twenty-five years. Now the two quotations about the mystic experience:

The hand which then is stretched out to her and seizes her is infinitely mild and cautious; in an almost indiscernible way it takes care of her and pulls her just as mildly, as majestically forward on His road; into His life, and this happens in a, for us, often hidden way.

Yes, everything drowns in the clear stillness of God and becomes one in It: everything becomes transparent, everything turns into crystal.

The following quotation, similar to the second one above, was selected from a letter to a lawyer friend of Ekström’s:

You are sort of absorbed, and drown in Him in heaven, in such a way that nothing remains but Him, nothing else than His will.

(Quotations from Geels, 1980: 206ff. English rendering by the author.)

The first quotation contains concepts referring to personal life. The lines allude to fatherly care and security, personal relations, in other

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1 I wrote a letter to Dr. Syz, wondering whether he was familiar with Buddhist thoughts at that time. In a letter dated December 30, 1981, he kindly replied: “No, I did not know about the principles of Buddhism when I wrote the early notes.” Dr. Syz added two letters sent to him, written by scholars who also noted the genuine ring of Buddhism in his notes.
words the social dimension lacking in the life of the handicapped woman. The second quotation, on the other hand, was sent to Hermelin, who “associated” with Persian mystics, whose texts are loaded with abstract symbolism like the moth which is totally annihilated in the flame, or the drop that loses itself completely in the ocean. This, I think, illustrates the use of language by a modern mystic, choosing his words with consideration taken to the addressee. This can only be understood if the function of language is that of the pointing finger, enabling a certain flexibility of expression.

How are we to understand the language of mystical experience? First of all: how do we define mysticism and mystical experience? In an earlier article (Geels, 2003a), I have argued for five dimensions of mysticism: the experiential, ideological, ritual, intellectual, and consequential (cf. Glock & Stark, 1965). In this contribution the focus will be on the experiential dimension. In order to meet the main purpose of the article, to apply a new model of analysis to mystical texts, a rather broad definition of mystical experience is suggested, a definition which includes visions and voices (see Geels, 2003). It is based on a study by Robert S. Ellwood (1980, p. 29). To a certain extent, I have expanded his definition, thereby allowing the inclusion of a broader category of experiences. The additions are marked in italics:

Mystical experience occurs in a religious or a secular context that is immediately or subsequently interpreted by the experiencer as an encounter with a higher or ultimate divine reality in a direct, nonrational way according to the subject that engenders a deep sense of unity and of living during the experience on a level of being other than the ordinary. This experience leads to far-reaching consequences in the individual’s life.

In the light of this definition, it is difficult not to include visions as a type of mystical experience. A religious vision is an encounter with a divine dimension of reality, according to the subject, an encounter which has the characteristics of perception.

Mystics usually and almost exclusively make use of the verbal medium to express their experiences. However, it is obvious that verbal expressions used by mystics are referring to states of mind which are all but verbal! These reports show attempts to widen the verbal contours, which appear to be too narrow for the mystic. Using an abundance of paradoxes, metaphors, neologisms, poetry, and verbal syncretism, the mystic tries to express the inexpressible. What is needed, then, is a model of analysis which enables us to reach levels
of consciousness beyond the written or spoken word. It is my conviction that the basis for such a model must be a multi-dimensional view of personality, including elements from depth psychology. During the last decades, scholars have offered multi-dimensional models of cognitive activity. One of these will be presented here. However, psychodynamic aspects are usually excluded from the agenda of the cognitive psychologist. I think that we cannot do without such aspects. The work of Antonio R. Damasio (1999, 2003) and others point at the importance of emotion for cognition. A holistic understanding of man’s psychological functioning must include preconscious and unconscious mechanisms. The object of this article is to suggest such a model.

1 Two assumptions

The line of argument is based on two assumptions. The first one is that the most fruitful starting point is a general systems approach. Systems are defined as “complexes of elements standing in interaction” (Bertalanffy, 1968: 33, 208; see also Allport, 1960). In his trailblazing study from 1968, the biologist Ludwig von Bertalanffy refers to a number of psychologists and psychiatrists connected with a systems approach. Together they counterbalanced behaviorism, which dominated American psychology during the first half of the twentieth century. This large-scaled experimental project, regarding man as a kind of robot which could be manipulated, prepared the ground for its antithesis. Those psychologists and psychiatrists who based their work on a general systems approach represented this counter movement. Some of them were Henry Murray and Gordon W. Allport within personality psychology, Jean Piaget and Heinz Werner in developmental psychology, Abraham Maslow in humanistic psychology, and Silvano Arieti and Carl Rogers in psychiatry and psychotherapy (Bertalanffy, 1968: 205ff).

The human personality can be regarded as a system in the above mentioned sense. For several decades I have based my thinking on such an approach, attempting to bridge the gap between cognitive psychology and depth psychology.

The second assumption pertains to developmental psychology. Among its proponents one finds psychologists who base their theorizing on an organismic-holistic view of development. Such a view is fundamental for one of the most well-known developmental psychologists of the 20th century. I am referring to Heinz Werner
(1890–1964), born in Austria, but eventually working in the United States. According to this view, “Every behavioral act, whether outward bodily movement or internalized cognitive operation, gains its significance and status in terms of its role in the overall functioning of the organism.” In addition to this, Werner advocates the teleological principle that the organism is intentional, its activity is directed. The overall goal of the organism is to survive as a biological and psychological being in a complex environment (Werner & Kaplan, 1963: 4ff; the quotation is on page 4).

Werner interlaces the organismic-holistic view of man with a developmental perspective. Wherever there is development, he states, one can observe that “it proceeds from a state of relative globality and lack of differentiation to a state of increasing differentiation, articulation, and hierarchic integration” (Werner, 1957: 126).

Supported by other scholars one could possibly object that Werner, as well as other developmental psychologists, for example Piaget, do not include aspects from depth psychology. In other words, there is something lacking in the organismic model of Werner (see also Arieti, 1967/1976: viii, 7f.). It is the goal of this article to attempt to combine cognitive aspects of development with psychodynamic factors. In this way the organismic model can be developed into an even more holistic view, here referred to the marriage between Ego and Id.

2 Id-oriented cognitive processes and religious experience

The concept of cognition can refer to a number of different processes, for example perception, concept formation, learning, memory, and problem-solving. It can also comprise emotional experiences, so called “hot cognition”. In addition, one can include unconscious or preconscious processes, or even primary process mentation (see for example Dixon, 1981).

We must reach beyond the classical Freudian view of development, expressed by him with the famous words, “Wo Es war, soll Ich warden,” where Id was, there Ego shall come into being. To make the unconscious conscious is not enough. “It is the transference between them that makes a human life, that makes a life human” (Loewald, 1978: 18, 31; see also Jones, 2001). Loewald is in agreement with many other psychoanalytically oriented scholars when he states that the development from Id to Ego does not follow a straight line, or “a movement further and further away from
The Freudian view that the rational Ego should not be contaminated by our irrational Id is countered by Loewald and others. Instead they emphasize that the Id and its processes and contents is continually with us and reminds us of its existence. It would be a severe loss if we lose contact with it.

The id, the unconscious modes and contents of human experience, should remain available. If they are in danger of being unavailable—no matter what state of perfection our “intellect” may have reached—or if there is danger of no longer responding to them, it is our task as historical beings to resume our history making by finding a way back to them so that they may be transformed, and away from a frozen ego (Loewald, 1978: 22f.).

In another wording, Loewald reminds us of Heinz Werner’s view of human development. The dynamic unconsciousness, a concept Loewald usually calls the Id, “may become integrated into a higher form of mental organization, or organized within a hierarchy of differentiated levels of mentation” (Loewald, 1978: 13). This integration is what we can call the marriage of Ego and Id.

All this not only means that we carry our different ages with us, so to speak, but that we also should take responsibility for them and integrate earlier unconscious forms of experience with our more developed self. “To be an adult,” Loewald writes, “means that; it does not mean leaving the child in us behind” (Loewald, 1978: 21f.).

In other words, Loewald and a considerable number of psychoanalytically oriented scholars have reached beyond the previous position that the actualization of earlier psychic functioning is to be understood as a regression in the service of the Ego. We are not dealing with regression but with progression or reconstruction within a more developed self, a kind of reciprocity in the development of Id and Ego. Loewald’s reformulation of the primary process in more positive terms, James W. Jones writes, “enables him to appreciate reli-

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2 The italics are mine. See also Jones, 2002: 92ff. It is James W. Jones who has inspired me to read Loewald. For Loewald’s importance for the psychoanalytic discourse on religion, see Jones, 2001.

3 See also p. 19: “The coming into being of higher organization, of a more complex, richer mentality, seen as the realization of a potentiality represented by the Id, seems ordained, as it were, by the laws of evolution.”

4 The good marriage between Ego and Id has also been observed by, for example, Kubie, 1958: 21f., 45; Ehrenzweig, 1967: part I; Suler, 1980; Smith, 1981; Holt, 1967; Noy, 1969; Arieti, 1976; Gedo, 1983: 33ff.
The marriage between ego and id

All these thoughts about what we have called the fruitful union of Ego and Id are evidently relevant to the study not only of religious experience—especially those of an intensive kind—but also of creativity. As far as intensive religious experience is concerned, I have in earlier studies of visions in contemporary Sweden tried to show that religious visions, which usually arise in situations of life crisis, can be interpreted psychologically as primary process directed autosymbolic representations, chosen by the synthetic function of the Ego in order to establish homeostasis (Geels, 1991; 1992; 2003). It is striking that the content of religious visions fits so well into life situations of disorder; the vision answers to the needs of the visionary. The vision immediately establishes order in chaos; it “shapes” the conflict—and solves it! In other words, religious visions, or object representations like Jesus, Muhammad, the Goddess Kali, or angels are symbolic representations of order that counter chaos. Harmony has again been established. Chaos lives next to God, the poet says.

My theoretical reflections on religious visions are in harmony with the position of Loewald. According to him there are links between primary process mentation and religious experience. Or, in more precise terms, religious experience can be regarded as a result of the fruitful dialectical interplay between primary and secondary process cognition, an interplay between the irrational Id and the rational Ego. This type of consciousness is a result of increasing differentiation and integration, if we wish to use the terminology of Werner. It is the true meaning of the word conscire, knowing together (Loewald, 1978: 57; for the concept conscire, see pp. 41, 65).

Psychological development can be seen as a double spiral, consisting of the Ego and the Id, which mutually can enrich each other. Without integrating processes of the Id we become “less” human. If we do not make use of our total capacities, the result is a kind of psychological atrophy. But if we acknowledge the fruitful encounter between Ego and Id, Loewald writes, “then we may be at a point where psychoanalysis can begin to contribute in its own way to the understanding of religious experience, instead of ignoring or rejecting its genuine validity or treating it as a mark of human immaturity” (Loewald, 1978: 73).

In his work on sublimation, Loewald returns to the capacity of the primary process to create unity in a world of multiplicity. He
now touches upon the meaning of the symbol in order to re-establish this unity: “The experience of unity is restored, or at least evoked, in the form of symbolic linkage” (Loewald, 1988: 45; Jones, 2001: 801). Symbols are links to the primary process. Religious symbols and experiences are neither a pure product of the unconscious nor a result of our rational consciousness. They are influenced by both ways of functioning—the marriage of Ego and Id. Religious experience, so Loewald states, can carry with it “a mourning of lost original oneness and a celebration of oneness regained” (Loewald, 1988: 45; Jones, 2001: 803).

3 Ego-oriented cognitive processes and religious experience

As we all know from introspective insight, cognitive processes are very complex. Let me give you an example from my own experience. It happened while lecturing on perception as a cyclical process in a large auditorium. Suddenly we all heard a strange sound. To me it sounded like propeller blades of a helicopter. For a split second the following happened in my mind: an association to war, a feeling of fear and a rationalization—the interpretation seemed all too unlikely. But if I had been lecturing in Baghdad or Basra I surely would have recommended the students to move and search for protection.

Within mainstream psychology one notices a growing awareness of the complexity of cognition. It has become rather common to speak about rational or cold cognition and emotional or hot cognition. In addition, one cannot exclude impressions of bodily and motor processes. In order to understand this complex activity, we need a more differentiated view of man as an interpretive and meaning seeking being. Within cognitive psychology there is a certain measure of consensus concerning the need of a multi-dimensional perspective of man as a cognitive and emotional being (Teasdale, 1999: 667).5

The most holistic model being used in the context of the psychology of religion has been suggested by the English psychologist

5 In this article the author presents several multi-dimensional models of the relation between cognition and emotion. Leventhal & Scherer have suggested three dimensions: (1) a sensori-motor level, (2) a schematic level, integrating the first mentioned level in image-like prototypes, i.e. generalized schemata of emotional situations, and (3) a conceptual level, i.e. memory structures, organized in propositions. These three dimensions are hierarchically organized. An additional model is called SPAARS, “Schematic, Propositional, Analogical and Associative Representation Systems”.
Fraser Watts, who relies on the work of John D. Teasdale and Philip J. Barnard (1993). The model is called “Interacting Cognitive Sub-systems” (ICS), a label which indicates that these scholars relate to a general systems approach. There are nine interacting subsystems. The first three of them are related to sensory and proprioceptive codes, i.e. acoustic, visual, and body state data. Two subsystems are at an intermediate level, handling information pertaining to linguistic units, the morphonolexical subsystem, and object codes. The authors label them as structural description codes. In addition, there are two effector codes, articulatory and limb. The two most important and fundamental subsystems are called the propositional subsystem and the implicational subsystem. Both are meaning codes, the former related to semantic space and the latter to holistic “senses” of knowing (Teasdale & Barnard, 1993: 52).

The propositional subsystem pertains to semantic relations, a rather specific kind of coding, a “knowing that”. It is a serial kind of coding. The connotation is close to the objects that the words refer to and therefore propositional codes are easy to grasp. They arise as generalizations of speech and object codes, related to visual objects and their relations. The meaning of the word “above”, for example, is a generalization of a number of experiences of spatial relations between objects (Teasdale & Barnard, 1993: 53).

The implicational subsystem is characterized by holistic, intuitive knowledge. From a developmental perspective it must be presumed that this subsystem, phylogenetically speaking, is the older one, while propositional meanings have developed later as a result of differentiation (Watts, 2002: 186). Its meaning-giving elements are more general or schematic. Instead of serial processing, the implicational subsystem functions with parallel processing. There is also a link to bodily and emotional states. Implicational schemata are the most comprising representations within this multi-level cognitive model. Elements from lower sensory levels are integrated with higher propositional meaning, and both into a more complex structure—the implicational subsystem.

Implicational code captures very high-level regularities in the world, the body, and the “mind”. The mental entities constructed at this level can be seen as schematic models of experience. These schematic models represent a holistic level of meaning. It is difficult to convey this sense of meaning adequately by language since the fairly direct relationship between words and related semantic entities and relations that exist at the propositional level no longer holds at the level of Implicational meaning (Teasdale & Barnard, 1993: 54).
It is obvious that the whole model reminds us of Werner’s definition of psychological development, quoted above: wherever there is development, “it proceeds from a state of relative globality and lack of differentiation to a state of increasing differentiation, articulation, and hierarchic integration.”

However, there is a paradox embedded in this line of reasoning. On the one hand the implicational subsystem is assumed to be phylogenetically older, but on the other hand it is suggested that it is the most holistic and developed way of creating meaning. How can these two seemingly opposing statements be united? The answer is easy from the viewpoint of Loewald and Werner: during the course of development, the older subsystem is enriched by its later derivatives! Just like the relation between the primary and secondary process, as described above, there is a certain reciprocity in the development of the implicational and propositional subsystems. We discuss this aspect in more detail later.

As we all know, implicational meaning comprises more than propositional meaning. Consider this example (from Teasdale & Barnard, 1993: 54f.): One person says to another: “Try again.” The propositional meaning is fairly clear: it means, “I want you to try again.” Further propositional meaning can, of course, be added. The person saying these two words may be a little girl who wants her father to save her beloved pet that has fallen down a well. Or the words could be uttered by an employer, who for the tenth time wants his employee to get the books in balance. If we add sensory elements, such as voice tone, facial expressions, and other types of non-verbal communication, then we create variations of implicational meaning, which in a holistic way captures the totality of meaning.

Every subsystem has its own code. The “cognitive architecture” of the system as a whole allows for both serial and parallel processing of information. Information from one subsystem can be transformed into the code of another subsystem. A second basic way of handling information is the copy process, which is to create an exact copy of all information and store it in the memory of the specific subsystem. Every subsystem has its own memory store. However, the same event can be stored in different subsystems. So, for example, an upsetting interpersonal encounter can be encoded and stored in parallel in sensory codes (sound, light), in perceptual codes (visual objects, speech components), in a semantic, propositional code, and in an integrative, schematic, implicational code. The last code “captures prototypical features of the situation corresponding to generic
aspects of experience extracted from previous episodes. The implicational code might represent, for example, the schematic model related to the prototypical ‘argument with person I care for but who does not understand me’ theme” (Teasdale & Barnard, 1993: 55f).

Implicational codes are more than the sum total of propositional meanings. This is clearly the case when we read poetry. “The impact of a poem depends on the combined, integrated effect of a complex of propositional meanings together with sensory contributions from the actual sounds of the words, the rhymes and meters with which they are spoken, and the visual imagery evoked” (ibid.: 72). Implicational meaning can, of course, also be mediated by other arts, for example painting, music, and drama.

Let us now relate the subsystems of the two meanings to the world of religion. It is obvious that implicational meaning is part and parcel of the spiritual traditions within world religions. One example is the habit of transmitting tradition with the aid of story telling, so common in Zen-Buddhism and Sufism. In the world of religion aspects such as aesthetics, ethics, and metaphysics are brought together in a holistic way. The use of metaphors is commonplace. The word “light”, for example, can in a Christian context mean several things: God as the source of light, the light of understanding, of good conduct, etc. (Watts, 2002: 185).

Within the mystical traditions of the world religions it is often stated that intensive experiences of the presence of God are ineffable. Some scholars are of the opinion that this attitude is a social construction, a learned aspect (see Proudfoot, 1985). But within the framework of the multi-dimensional cognitive system being discussed, “the claim that religious experience is ineffable makes perfectly good sense. Ineffable experiences are presumably those that arise in the implicational system, and are encoded there. The sense of ineffability arises from the difficulty of translating a certain core of implicational meaning into any other code” (Watts, 2002: 185f.).

It goes without saying that there is a substantial portion of propositional meaning in the world of religion. Religious cognition, Watts states, often consists of a coordination of the two subsystems (see ibid.: 187). A certain system can, however, take a dominant position. In the case of theological texts, propositional meaning predominates, while implicational meaning characterizes texts pertaining to contemplative traditions. An example of reciprocity between the systems is, I think, when a person in meditation or prayer feels the presence of God at the implicational level and then communicates the experience
in a letter to a friend, i.e. at a propositional level. Meditation is a good example of a religious activity which can bring about changes in the cognitive subsystems. According to Teasdale and his collaborators, the Buddhist technique called “mindfulness” can lead to an integration of subsystems (Teasdale et al., 1995). But there are other effects of practicing meditation. One of them could be that practice in meditation leads to the shutting down of certain subsystems, those that handle verbal information, in other words the morphonolexical and articulatory subsystems. It might well be, Watts continues, that shutting down articulation thus may “lead to a temporal emphasis on implicational rather than propositional meanings, which may be linked to a degree of separation between the subsystems. There is the possibility that meditation leads to the two systems being partially dissociated for a period of time in what might be regarded as an altered state of consciousness.” In any case, Watts concludes, theology, like all other academic disciplines, is formulated in propositional code, while a substantial part of religious language contains holistic, implicational meaning (Watts, 2002: 187f).

Let me push this issue just a little bit further. Could this line of reasoning shed new light on issues such as the fundamentalist controversy, the problem whether the Bible should be interpreted literally or metaphorically? Are these different attitudes towards Scripture related to certain personality traits? Perhaps it is reasonable to assume that human beings also differ in their capacity to think propositionally or implicationally. It is obvious, for example, that not all people love poetry, or understand metaphors or verbal imagery. I think that this problem can be discussed in more detail with the support of psychodynamic theory.

4 The marriage between Ego and Id—ICS and psychodynamic theory

The model of interacting cognitive subsystems presented above is clearly based on a systems approach. The interrelation of the nine subsystems shows, for example, how cognition and emotion are related. According to its founders, the model “claims to provide a comprehensive conceptual framework within which, in principle, accounts of all aspects of information processing can be developed” (Teasdale & Barnard, 1993: 61f).

I have taken this statement ad notam and intend in this section to attempt an integration of the two models. Let me state from the
outset that I think that the relation between Loewald’s psychodynamic view and interacting cognitive subsystems is complementary. The defenders of the multi-level cognitive model are cognitive psychologists, some of them with a link to neurology. It is my conviction, however, that a fuller understanding of cognition can be reached when traditional cognitive psychology takes psychodynamic theory seriously—and vice versa of course. Let us start with a comparison of the two perspectives.

First of all, both approaches share a general systems approach as proposed by Ludwig von Bertalanffy, an approach which has been adopted by a great number of psychologists. The different aspects of psychodynamic cognition, i.e. primary and secondary processes, as well as the nine subsystems in the cognitive model are good examples of “a complex of elements in mutual interaction.”

Secondly, they seem to share a common basis in Werner’s definition of psychological development, saying that development “proceeds from a state of relative globality and lack of differentiation to a state of increasing differentiation, articulation, and hierarchic integration.” In the case of interacting cognitive subsystems, there is development from an assumed earlier stage of implicational code, a differentiation into propositional code, and a new integration of both subsystems. In the psychodynamic model of Loewald, and similar models presented by other scholars, we do encounter the distinctions between the earlier functioning of primary process cognition, the later development of secondary process, and its integration.

A third similarity, closely related to the second one, pertains to the interrelationship between the subsystems, whether Loewald’s psychodynamics or interacting cognitive subsystems. Phylogenetically speaking, the primary process and the implicational subsystem are assumed to be older than the secondary process and propositional meaning respectively. In addition, the mutuality between primary-secondary process cognition and propositional-implicational meaning leads to new levels of meaning and integration.

I do think, however, that the concept of the dynamic unconsciousness and its primary process mentation, as defined by Loewald, deepens our understanding of the implicational subsystem. The main characteristic of this process is condensation, which, according to Loewald, is relevant to the mystic’s experience of nunc stans, the abiding now, as quoted initially in this article. During this timeless moment, “temporal and other articulating differentiations are dissolved or become condensed into oneness” (Loewald, 1988: 65).
Other characteristics include emotionally charged imagery and plastic representation.

However, we do have a problem, I think, with terminology in the psychodynamic model. Loewald, as we have noticed above, latches on to Freudian concepts, but re-interprets them in an almost non-recognizable way. This easily leads to misunderstandings. The primary and secondary concepts in the Freudian frame are a result of linear thinking. But they are used by Loewald and others in a rather cyclical way. The two kinds of cognition are similar to a double spiral, interlinked at every level. This means that primary process thinking at the level of a three year old child is different from primary process cognition in the adult. Some scholars have proposed a new terminology for what Silvano Arieti (1976) has called “the magic synthesis”—the tertiary process.

I think that religious visions, as described above, are a result of the interplay between Ego and Id, an integration of the two main systems, both within cognitive psychology and psychodynamics, a “magic synthesis” creating order in chaos.

A final question is how we can operationalize this wider model—actually a result of increasing differentiation and integration—in order to reach a fuller understanding of mystical experience. We have already pointed out that the aspect of ineffability is related to the assumption that mystical experience is at an implicational level and therefore cannot adequately be grasped at a propositional level. The mystic does his or her utmost to stretch the limits of language by using paradoxes, metaphors, similes, stories, poetry, and the like. In other words, the intensive experience of divine presence leaves traces in the mystic’s verbal attempts to express the inexpressible.

I think there is a relevant analogy in the psychology of creativity. The Swedish psychologist Marianne Jeffmar has studied the relation between creative insight and its verbal expression. Since she connects with both Werner and a general systems approach she fits exceptionally well into this discussion. The creative person, she writes, has an ability to combine imaginative processes with so-called duc-

tive processes, comprising both deduction and induction. The third process in her model, called “Ways of Cognitive Action” (WOCA), is the annotative process. Annotative processes are most dependent on the environment, while imaginative processes are least dependent on the environment. In between she places the abstract and analytical duc-
tive processes. Imaginative processes appear to be the equiv-
alent of the primary process in psychoanalysis, while the other two cognitive styles are related to the rational secondary process (Jeffmar, 1978a: 16f.; 1980: 266f.).

The three “ways of cognitive action” are hypothetical constructs, Jeffmar states. This statement is, of course, just as true for the different models we have discussed above. The issue at stake now is how we can find verbal traces of them. Jeffmar’s suggestion is that the three cognitive styles are mirrored in certain empirically testable sub processes (see Jeffmar, 1976, for the empirical test). Imaginative functioning is expressed in the sub process syncretism; ductive styles are expressed in the sub process flexibility, while the annotative process shows itself in exactness. Syncretism is defined as “(a) a disposition towards forming combinations and/or fusions of disparate concepts or elements in a confident and/or unexpected way. It is also defined as (b) a tendency not to keep apart phenomena and facts, feeling and perception. The resulting associations seem to be made without careful consideration.” Flexibility is defined as “a disposition towards conscious, intellectual interpretations of phenomena and facts in (a) different, and/or (b) unexpected ways. These interpretations are of the nature of forming or testing hypotheses. Flexibility is also seen as (c) a tendency to view phenomena as well as facts as contrasts to each other.” Exactness, finally, is defined as “a disposition towards literal interpretations of phenomena and facts” (Jeffmar, 1976).

If, for example, a person is asked to, “Say something about the word ‘darling’.” We can have the following kind of responses: “My darling is like a gold berry” (syncretism), or “The word ‘darling’ can mean different things depending on the context” (flexibility), or “A word that consists of seven letters” (exactness) (Jeffmar, 1976: 7).

Again, just as is the case with the two approaches as described above, it is the joint activity of imaginative and ductive processes that makes the creative person. In another article, Jeffmar relates these two processes to the primary and secondary processes in psychoanalysis (Jeffmar, 1980: 267). However, if there is a dominance of ductive and annotative processes, the person can be highly intelligent, but with little creativity. In the first case we encounter what I have called the marriage of Ego and Id; in the second case we recognize a bad marriage.
Let us return once again to the relationship between the ICS model and the thoughts of Loewald and other psychodynamically oriented scholars. I think that the implicational subsystem, characterized by holistic, intuitive knowledge and parallel processing, needs to be supplemented by concepts derived from psychodynamic scholarship. In the ICS model there is little mention, for example, of mental imagery, so important in the world of religion. However, scholars within the field of psychodynamics often do include this cognitive dimension within their models. An important example is Mardi Horowitz (1978), who with reference to Ernst Bruner’s well-known distinction between enactive, iconic, and symbolic stages of development differs between three fundamental modes of representation of thought: enactive, image, and lexical. The concept representation is defined as “an organization of information in a form that can be part of conscious experience” (p. 81; see also Suler, 1993). As far as enactive and lexical representations are concerned, the ICS model is more differentiated. The image mode, however, is described in more detail by Horowitz and others (e.g. Morris & Hampson, 1983), at least as far as taxonomy and image activation are concerned.

Horowitz categorizes images in accordance with their vividness (e.g. hallucination, pseudohallucination, thought image), their context (e.g. hypnagogic or hypnopompic, dream, flashbacks), their interaction with perception (e.g. illusion, perceptual distortion, synesthesia, after-image), and their content (e.g. memory image, eidetic image, body image, phantom limb, imaginary companion) (Horowitz, 1978, chapter 5). Images can be part of a reality-oriented, rational thought, but they can also be emotional and idiosyncratic, without orientation towards the environment and not immediately understandable by the self or others. These images, Horowitz states, “tend to be arranged by primary process types of association, with evidence of condensation, displacement, and symbolization. Image formation, in these circumstances, may gratify wishes; it may also express conflicted and previously hidden ideas or memories” (ibid., p. 102).

Suler (1993) takes a further step by expanding the enactive system to include not only motoric codings but also a variety of other physiological patterns, such as gastrointestinal, vascular, respiratory, and cardiac activities. Image coding, he continues, is based on input from the sensory systems of the body, and they include visual memories
and imaginings. “Being holistic rather than linear expressions, images can depict simultaneously a variety of affects and ideations.” In contrast, the lexical system involves semantic and linear coding, more influenced “by the reality-oriented demands of secondary process” (p. 102f.).

Bearing these concepts in mind, subjective religious experiences can be understood in terms of decreasing or even shutting down of one or more coding systems. The only way to find traces of these kinds of processes is to analyze the verbalizations of mystics, i.e. the texts and reports of living persons who claim to have experienced the presence of God, however defined. We will make an attempt to do so in the next section. But before this, we again have to address the problem of operationalization.

The only scholar suggesting how to apply theoretical concepts is Jeffmar. I will start with her suggestions and then propose ways of how we can develop her ideas pertaining to the operationalization process. To the best of my judgment, the concepts of Jeffmar, as described above, can be applied to the analysis of mystical texts. We are back to the point of departure. The two verbal descriptions of the presence of God by Hjalmar Ekström, quoted in the first pages of this essay, are good examples of the sub process flexibility. Ekström adapts himself to the expected needs of the addressee. In addition to the sub processes as mentioned by Jeffmar we could include the mystic’s readiness to create neologisms. An example in the letters of Ekström are the concepts “born out” and “born in”, used in his mystical theology in order to describe the death of personality and the rebirth in Christ consciousness (see Geels, 1996: 212). Another example is Simone Weil (1909–1943) and her concept “décréation”.

It would not be too difficult to find examples both of syncretism and flexibility in the texts of the mystics, especially in the case of so-called cataphatic experiences, for example visions and voices of a divinely interpreted world. They often show how different elements can be combined in surprising ways. But I do think that these concepts do not suffice in order to reach a deeper psychological understanding of the possible processes involved in visionary experience. What we need are more tools in order to find traces of implicational coding or primary process cognition. As far as the primary process is concerned we already have a description of its sub processes, as described by Freud. I am referring to condensation, displacement, and symbolization. A further step in the direction of operationalization,
I think, is what H. Leuner with reference to H. Silberer has called autosymbolic representations of intrapsychic needs or conflicts. Autosymbolic representations can be regarded as an example of condensation, displacement, and symbolization, as the following example will show.

I once participated in an intensive course in gestalt therapy. During one of our sessions we did an exercise in guided affective imagery. After about half an hour of relaxation we were instructed to imagine a place where we wanted to be, preferably with beautiful scenery. Afterwards we had a chance to share our imagery with the group. A young man, who during previous exercises seemed to be close to aggression, shared this description with us. He sketched a nice summer scene comprising a farm, the smell of cut grass and newly baked bread. Then he said: “Suddenly I saw this huge bloody fire!” Immediately he realized that the huge fire was a symbolic representation of his aggression. It contains aspects of condensation, displacement, and symbolization.

When we study texts of mystics, especially descriptions of visions and voices, we come across numerous examples of autosymbolic representations, creating order in a life situation characterized by disorder or even chaos. Let me illustrate with a few examples, first of all Hjalmar Ekström, generally regarded as an authentic contemporary mystic.

6 Case studies—A new interpretation of mystical texts

“Hereafter, the path becomes pathless”—Hjalmar Ekström

After eight years of disharmony, during which he educated himself to be a deacon and spent about four years in service, Ekström experienced a severe existential crisis. He was in his early thirties. We will focus our attention on a decisive visionary and auditive experience in his life. Naturally, this experience should be analyzed in a biographic context. Therefore, a minimum of background information is necessary in order to reach a fuller understanding of the vision.

Ever since an important religious experience in his early teens, the young Ekström nourished a dream to realize a life guided by an active Christian approach. However, as the oldest of a large family with eight children he was obliged to contribute as a breadwinner. After ten years of work in his father’s shoemaker workshop, he was finally able to realize his dream by studying to become a deacon.
It took him four years to complete his studies. He then began to work in the field and devoted himself to social work, dealing with youth and alcohol problems. But after a couple of years of work, his high-flying expectations were dashed to the ground. He left the deacon service in the spring of 1914, following a deep spiritual crisis. For one and a half years he wandered through Sweden preaching the simple teachings of Jesus, based upon the message of the Sermon on the Mount. Among the motifs dominating his letters to his wife during this time, one encounters the conviction of God’s guidance in all walks of life. “God guides in everything, may we be secure and happy and with courage follow his paths,” he wrote in October 1914 (Geels, 1996).

The necessities of life forced him to return to the deacon service in the fall of 1915, a situation which must have created considerable conflict. The new position did not last long. In the spring of 1916 he requested a leave of absence which lasted the rest of his life. He radically severed all ties with the deacon institute and the deacon service. After these difficult years he then took a vacation and hiked in the woods. There he had his most decisive experience, several years later defined as “mystical death.” Despite his reticence concerning his own experiences he gave the following account to a good friend as an answer to his pressing questions. “You often mention mystical death,” his friend wrote, “but do you yourself have experience of this phase in spiritual development?” In a short but utterly revealing reply Ekström finally wrote: “It [mystical death] is really, at least according to my experience, like a fire which cuts through everything, leaving nothing for man” (Geels, 1980, p. 208). The visionary and auditive aspects of this experience are clearly described in a secondary text, written down by a younger friend following Ekström’s own account and approved by him:

He went wandering in the woods alone. The path led up to a hill. Then it was as if God’s eternal love and God’s eternal wrath had met in one place, like a ball of lightning, “which flamed down and to the sides like a cross, filling all the heavens and the whole earth, consuming everything.” At the same time, he heard a voice which said: “Hereafter the path becomes pathless.” And he was cast into nothingness. Heaven was empty and the earth was empty and Hell as well. At first he hardly knew whether he saw or heard even with his outer senses. He dimly recalled that it was as if the Day of Judgment had arrived. But he came to his senses again and continued, tremblingly (Geels, 1980, p. 157f., 247, note 18).
Similar descriptions recur both in unpublished letters and in a published commentary on the Song of Songs. My understanding of this crucial experience is as follows.

Ekström’s break with the deacon service, where he had spent eight hard years, must have given rise to the question—conscious or not—of whether or not he was still being guided by God. After all, this motif dominated his discourse during the years preceding his “mystical death.” Was God still on his side? Was there still divine guidance, now that he had resigned from the vocation of deacon? All this created a strong need of confirmation.

From this perspective of self doubt, it is hardly surprising that Ekström’s transforming moment came exactly during this phase in his dramatic life. The decision to take a few days holiday was made after he, his wife and their two-year-old child had settled down in a shoemaker’s workshop in his home town. This probably felt like a great sigh of relief, after eight years of dissonance. Alone in the woods there was relaxation for him. Relaxation or receptivity appears to be an important factor for intense religious experiences. This has been known since the pioneer time of J. Starbuck and W. James, both of whom mentioned the psychology of self-surrender. This is similar to what G. Wallas (1926) called “incubation”, one of four phases in the creativity process, used by C. D. Batson and W. L. Ventis (1982) in order to analyze conversion experiences. Self-surrender and incubation also remind us of E. Schachtel’s (1959) concept “allocentric perception” and Deikman’s (1971, 1976) “receptive mode of consciousness.”

The visionary and auditive experience rendered a solution to the assumed conflict. Conviction replaced doubt—there was divine guidance after all. The lightning bolt, shaped as a cross, and the words that from now on “the path would be pathless” can clearly be described as autosymbolic representations of his need to receive an answer to his fundamental question. Even if the path would be pathless, Ekström now knew there was still guidance. The verbal message “hereafter the path becomes pathless” and the visual impression of a flaming cross are two impressions creating a new meaning. The verbal message is a metaphor for his new life situation, when he cut off relations not only with a great number of people but also with the Swedish church. The cross, as the most central Christian symbol, showed, for Ekström’s eyes only, that there is guidance. Regarded separately, the verbal and visual components appear to be unrelated.
In combination, they present a powerful and convincing message, giving the life of Ekström meaning and direction.

In terms of the ICS model it appears reasonable that a walk alone in the woods, leading—psychologically speaking—to a receptive mode of consciousness, might facilitate a decrease of the propositional subsystem, leaving more room for image formation and the implicational subsystem to create new integrations for the purpose of homeostasis.

The following years in the life of Ekström were difficult for him and his family. In 1917 he fell severely ill with the Spanish flu, which took many lives. Afterwards, his health was precarious. He felt intensely lonely. It took him approximately six years to verbalize the experience in a self-made religious frame of reference, the fruit not only of intense reading of mystical and philosophical texts, but also of increasing correspondence with kindred spirits. He then shared this unique mystic philosophy, his scala spiritualis, with a small group of people. For them he served as a spiritual leader or guide on the mystical path. His dream to care for the souls of others was realized after all, but in a difficult and extremely independent way. Still today, small collections of his letters reach new readers, who find comfort in his simple and beautiful way of expressing difficult themes.

The case of Violet Tengberg, artiste peintre

Violet Tengberg (born in 1920) had her international breakthrough in 1967, at Drian Galleries, London. Critics noticed her intense colors and her religious symbols, especially the Christian cross.

During the last years of the 1960s the artist struggled with intense problems of meaning, both with artistic creation and life in general. “Life”, she wrote in a letter to a well-known literary historian, “is meaningless if it doesn’t aim at something higher and bigger than that which man can bring about. If this didn’t exist, than everything would be as a soap-bubble, which easily can be punctured, and life would be one great roar of laughter” (all quotations from Geels, 1989).

In 1969 Violet Tengberg had several decisive religious visions. One of them was the sense of being “riveted to the cross.” She saw two small crosses unite and out of them grew a taller one, uniting with her. The visions completely changed Violet Tengberg’s worldview. One of the consequences was that she now felt the urge to reveal glimpses of Divine Reality through the medium of her brush and pencil.
The main purpose of studying this internationally recognized artist was to investigate the relation between her religious visions and her artistic creations. I contrasted her “outer” world in the form of artistic creations, development of motifs, articles of critics, and so on, to her “inner” visionary world, which was a sort of key to understanding the symbolism in her art.

Her visions are too numerous to mention. I will first comment on her vision of the three crosses and then focus on her experiences of what she calls “Original man” or the “Progenitor”.

It seems obvious that the vision of the three crosses responds to Violet Tengberg’s need for meaning with life in general and with her being an artiste peintre—a French expression she prefers—in particular. It is, of course, not surprising that the Christian cross appears to her. It was a dominant theme in Violet Tengberg’s paintings during the years prior to this vision in 1969. One art critic wrote that she “seemed to be obsessed by the cross.” About one year prior to this vision she felt as though she were “a medium for something unspoken.”

This last remark can be related to the well-known work of Ernst Kris, writing about regression in the service of the Ego. Kris speaks about a state of inspiration, during which an artist, poet, or prophet, is convinced that an outside power uses the human being as an instrument. The psychological understanding of this phenomenon, Kris asserts, is that the Ego functions of the artist, including his or her defense mechanisms, decrease in strength, giving room for primary process cognition. When the person concerned interprets this state of inspiration, it is close at hand to regard it as a result of divine inspiration (Kris, 1953, p. 295, see also p. 59).

When Violet Tengberg had her vision of the three crosses, it confirmed to her that there is such a divine dimension acting in the world. There is now no longer any doubt as to the purpose of her life. In a letter dated September 5, 1972, Violet Tengberg wrote “that it is wonderful to have knowledge about why one wanders on the earth and what it means to be a human being.” One consequence was that she wrote several hundred poems in a few weeks’ time. Life had meaning and purpose at last. Violet Tengberg now felt the urge to reveal glimpses of Divine Reality through the medium of her brush and pencil. Her message is about love and understanding.

What was the role of religion in her life at that time? Violet Tengberg answered that religion then did not have an important
place in her life. This is somewhat difficult to believe considering the fact that the cross was a dominant motive in her art during the 4–5 years preceding her vision. The impression one gets is that the artist identifies with the crucified Christ and that her vision of the cross can be regarded as a kind of parallelism to the Passion. In the terminology of this article, the vision can be described as an autosymbolic representation, an example of the plastic primary process, and at the same time, from the perspective of the artist, an “answer to the question,” written in capitals by Violet Tengberg. We should not forget that we are working with verbal reports of an experience which primarily was visual and emotional. Since it integrates coding at different levels it can be regarded as an example of implicational coding.

Let us now turn to the “Original man” or the “Progenitor.” The motive appears to have roots in the artist’s childhood. Violet Tengberg’s mother used to tell about “the wandering Jew.” “Do not be afraid when you encounter him,” she said to Violet. One day, when Violet was twelve years old, she walked back from school and saw an old man with a rough walking stick. She showed him respect by making a curtsey. She then ran home and told her mother that she had met the wandering Jew. “No, no,” her mother replied, “the wandering Jew is invisible for ordinary people, but those who have received a gift from God are able to see him.”

More than forty years later she saw this representative of ancient wisdom in a bakery, of all places. She was waiting for her turn. On a shelf there was half a loaf of bread. Suddenly she saw the face of an old man with long hair. “I’ll never forget his face,” Violet wrote. “All the wrinkles in his face were clearly visible. His eyes were mild and his hair was long and white. Across his forehead there was a band of gold, I only saw his face and I regarded him as very sacred.” When leaving the shop she came to think of the phrase, “He is the bread of life,” referring to the words of Jesus: “I am the bread of life” (John 6:35). Again and again Violet Tengberg said to me that she had never seen this figure before. It was my task, I thought then, to trace the visual impression influencing this vision.

Violet Tengberg knew that this vision contained a message to her. Once, when she was in London visiting the National Gallery she looked into a book about William Blake, her favorite artist, and saw this very same person drawn by Blake. Immediately she understood that Blake also had seen him. Like Violet Tengberg he belonged to the selected few. At the same time she heard a voice saying: “This
is the Progenitor, Original Adam, who shows himself to a few selected persons in every century."

Violet Tengberg now knew who the person in the vision was, but she did not know what he wanted from her. In some additional visions she encountered him in full-length, wearing an ankle-length gown. In her diaries she wrote: "Since yesterday I have seen him in full-length. He has a very old face, very wise, but not weighed down by age. He has white hair and around his forehead there is a band, probably of gold, but its color is indefinable."

One day the Progenitor appeared to her again, this time just outside her summerhouse. Violet Tengberg was reading a novel written by the well-known Swedish author Selma Lagerlöf. The novel is about a group of people who traveled to the Middle East. One of the knights, Violet wrote, tore off the hem of his mantle and tied it around his forehead as a symbol that he brought the message of God out in the world. Violet Tengberg then understood the meaning of this band around the forehead of the Progenitor. He was a messenger of God and the assignment he gave her was that she should forward the message.

The last time Violet Tengberg had a vision of the Progenitor was in June 1983, during a visit in the Norwegian mountains. During all the ten years that she had seen him she always associated him with William Blake. On one occasion I asked her to make a drawing of him. When she showed it to me some time later I immediately recognized the old man. "This is the famous self portrait of Leonardo da Vinci!" Violet Tengberg agreed. But there was one important difference: Leonardo did not have a band around his forehead.

How are we to account for the combination of a verbal and a visual impression, the fruitful reading of Lagerlöf and the visual impression of Leonardo da Vinci? First of all, we can notice a lapse of memory. Violet Tengberg thought that the Progenitor was related to Blake, but it turned out that the contents of the vision is similar to the portrait of Leonardo. We will have to assume that Violet Tengberg had seen this portrait before. After all, she went to art school and as an artist she traveled around in the world, visiting many museums. Apart from the band around his forehead, there is another difference between her vision and the portrait of Leonardo: in her vision he showed himself in full-length. In additional visions he could be accompanied by other persons, for example a pope or the desert father St. Anthony. She sometimes conversed with the old man. When he was carrying a heavy sack on his back she wondered
why he did not put it down. The Progenitor replied by putting the sack in front of her. It opened and a seven armed candlestick appeared, associated by Violet Tengberg with Solomon.

The ankle-length gown is a common description of how people dressed in Biblical times (see e.g. Rev. 6:11; 7:9). The walking stick with it marks from many branches means, according to her own interpretation, wandering in the inner world of the artist herself. The story of the wandering Jew, as told by her mother, has been developed visually in the imagination of Violet Tengberg. When he appears together with a pope and the hermit St. Anthony, in some ways the reverse of the pope, there is another message. The pope wearing ceremonial robes represents power and wealth, while St. Anthony usually stands for submission and poverty. The temptations of St. Anthony is a popular theme in art and literature.

What do the visions of the Progenitor mean, psychologically speaking? The answer is, I think, that they do have a confirmatory function. When the primary process “ties” a band around the forehead of the Progenitor, the message is that Violet Tengberg also belongs to the chosen ones, and that it is her task to pass on the message. Two elements that at the secondary process level are totally unrelated, the visual impression of Leonardo and the verbal impression of Lagerlöf, now are combined at the primary process level. When the artist interprets the vision and writes that the old wise man showed her that she “has to pass on the message,” symbolized by the seven armed candlestick, then the primary process and secondary processes are in harmony, a marriage between Ego and Id. This means that, psychologically speaking, these series of visions appear to be primary process produced imagery, a combination of both verbal and visual stimulation, constantly changing. Violet Tengberg regards them as real and she locates them in the outer world. From our perspective the visions can more precisely be described as auto-symbolic representations of intrapsychic needs.

A letter in blood and ink—Abraham Abulaia

Abraham Abulaia is one of the most important mystics in the Jewish tradition. He was born in 1240 in Saragossa in the province of

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Aragon, Spain. After a few years his family moved to Tudela in Navarra. The young Abulafia was brought up in accordance with traditional Jewish customs. Two years after his father died, when he was about eighteen years old, he started his travels. First he went to Israel, then to Greece, where he got married, and then to Italy. There he studied philosophy, with preference for the great Jewish philosopher Maimonides (1135–1204) and his important text “Guide of the Perplexed.” In the course of time he returned to Aragon. For about three years he studied kabbalistic texts, especially commentaries to “The Book of Creation” (Sefer Yetsirah). Abulafia’s teacher introduced him to contemporary mystical techniques, and at the age of 31, Abulafia reached the state of prophecy. In his numerous texts he also reveals many visions. Later, in 1285, he mentions that they sometimes were sent by demons, in order to confuse him. Abulafia died in 1291.

One of the most interesting visions reported by Abulafia is the one of a man, on whose forehead he saw a letter inscribed in blood and ink. In order to be able to understand this vision we have to remember that for the kabbalists blood is a symbol of evil impulses, the faculty of imagination, while black represents positive impulses or the intellect (Idel, 1988b: 95ff.). Abulafia first mentions that this vision was sent by God. The man was coming from the west with a great army of twenty-two thousand men. The man observed Abulafia’s “great fear” and “strong awe.” On his forehead was a letter in blood and ink, symbols of the permanent struggle between the rational intellect and imaginative thought, or between the Angel of Life and the Angel of Death. In the vision the man says to Abulafia:

> You have been victorious in my war, and you changed the blood of my forehead, and their nature and color, and you have stood up to all the tests of my thoughts. Ink you have raised and upon ink you shall be aggrandized; the letter you have sanctified, and by means of the letter and wonder you shall be sanctified.

According to my judgment, this vision is an exceptional pronounced illustration of the process described above. Blood turns into ink. The imaginative faculty, as described in the psychology of that time, is

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7 According to Idel (1988b, p. 154, note 107), “This number alludes to the parallel between the twenty-two letters and the people.”

transformed into the spiritually much more developed intellect. It is via the intellect that man can cleave to the so-called Active Intellect and Shekhinah, a female representation of Divine emanation and the lowest manifestation of the divine hierarchy. When blood turns into ink, Abulafia tells us that he too is one of them, the spiritual virtuoso. The vision answers to a probable need of confirmation. In our terminology it can be described as an autosymbolic representation of his intrapsychic need of confirmation. In other words, the vision furnishes Abulafia with spiritual credentials.

The station of Muhammad—Ibn Arabi

Spiritual self-affirmation is not uncommon. Another example is the great Muslim philosopher Muhyi ad-din Muhammad ibn Ali Ibn Arabi (1165–1240). He mentions that he once saw—for his eyes only—“all the prophets from Adam down to Muhammad.”

Ibn Arabi was born in Murcia, southeast Spain, and belonged to an Andalusian upper-class family. His father was a high-ranking dignitary working for the local ruler. When Ibn Arabi was seven years old his family moved to Sevilla, then an important center for Sufism. Already in his early teens Ibn Arabi met the famous philosopher Ibn Rushd (Averroes) in Córdoba. “He wanted to see me, as he had heard of the illumination (fath) which God had granted to me during my retreat.” From this information we learn that Ibn Arabi already at an early age had spiritual experiences. In his later teachings he explains that such examples of what we can call spiritual virility are extremely rare. However, from this time on he was endowed with numerous divine unveilings. He mentions that his conversion (tawba) occurred before the age of twenty. Within Sufism this stage means repentance and the firm desire to return to God. Shortly afterwards he met his spiritual master, who advised him to “break all ties and keep company with the All-Bounteous.” With this support, Sheikh Ibn Arabi started his spiritual journey (Addas, 1993: 49ff.). During the first years of the 1190s Ibn Arabi traveled a great deal, especially in North Africa. When he returned to Sevilla in 1194

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11 Ibn Arabi, al-Futūhāt al-makkiyya, quoted in Addas (1993), p. 34.
he started to teach and write, and continued with this until his death in 1240.\textsuperscript{12}

In his numerous autobiographic accounts, Ibn Arabi describes many visionary experiences, all circling around the theme of spiritual election. The most important one occurred when traveling. He was in Fez in Morocco when he made his most extraordinary journey, the one through the seven heavens, a spiritual ascension (mi'raj). The Muslim prototype is, of course, the ascension of Muhammad.\textsuperscript{13}

In an autobiographical account, Ibn Arabi presents details of this important inner journey. At the first heaven he was greeted by Adam, the father of humanity. At the next he had a discussion with Jesus and John. He then met Joseph at the third heaven, and Idrîs (Enoch), who saluted the “Great Sheikhh” as the “Muhammadan heir,” at the fourth. Then, at the fifth heaven, he was greeted by Aaron, who described him as the “perfect heir.” In the sixth heaven Moses described and explained his vision of God to Ibn Arabi. Finally, he entered the seventh heaven. There he encountered Abraham, leaning against the Celestial Ka’ba. From there he reached the final stage of ascension. He turned into nothing but light and God said:

“Say: we believe in God, and in what has been revealed to Abraham, Ishmael, Isaac, Jacob, and the Tribes [of Israel] and in what has been given to Moses and to Jesus” [Sura 3:84]. Through this one verse He gave me all the verses ... In this way I came to know that I was the totalization of those whose names had been mentioned to me [...]; this was for me the announcement that I had attained to the station of Muhammad ... During the course of this Nocturnal Journey I obtained the meaning of the Divine Names and I saw that they all referred to one and the same Object Named and to a single Essence; this Named was the object of my contemplation, and this Essence was my very own being.\textsuperscript{14}

In December 1229 Ibn Arabi had another important vision. He saw the Prophet, who handed him the “Bezels of Wisdom” (\textit{Fusûs al-hikam}) for the benefit of mankind. Then, in humble, yet pretentious terms, Ibn Arabi says of himself: “I state nothing that has not been projected towards me; I write nothing except what has been inspired

\textsuperscript{12} For more information see chapter 5 in Addas (1993).
\textsuperscript{13} Heavenly ascensions are well-known within the earlier Jewish \textit{merkavah} and \textit{hekhalot} traditions. The theme can also be found in the pseudepigraphical “First Book of Enoch.”
in me. I am neither a prophet nor a messenger, but simply an inher-
itor; and I labor for the future.”

These visions, and numerous others, all appear to have the same
psychological function, as in the case of Abulafia: spiritual autho-
ization or empowerment. In her analysis of this kind of event, Ibn
Arabi’s biographer comes to the conclusion that the visionary encounter
with earlier prophets and messengers has this meaning: they all con-
gratulate him for being appointed the “Seal of Sainthood,” the high-
est spiritual nomination (Addas, 1993: 76). In the terminology of this
article these visions seem to be autosymbolic representations of Ibn
Arabi’s need of confirmation to belong to the spiritual virtuosi.

Encounter with Jesus in the dormitory—Gertrud of Helfta

In Germany, southwest of Magdeburg, there was a Benedictine con-
vent in a little place called Helfta. The convent was founded in 1229
and is known for having been the residence of several of the most
important female mystics in Germany. One of them was Gertrud,
later known as Gertrud the Great of Helfta (1256–1301). One of
her main occupations was writing, especially on mystical themes,
both in Latin and German.

We know very little about Gertrud’s early life (see Marnau, 1993).
It is highly conceivable that she was placed in the convent when
her parents died. Gertrud was then about five years old. In the con-
vent she received an excellent education. The nuns not only stud-
ied great church fathers such as Augustine and Gregory the Great,
but also important contemporary authors—the Victorines and Cister-
cian masters.

In her autobiographical writings we find some information about
Gertrud’s conversion and spiritual experiences. Just like many other
mystics she divided her life into “before” and “after.” She is refer-
ring to her conversion. In Gertrud’s case this means that her rou-
tine life in a Christian convent, following a monastic rule, with room
for other interests and motivations, now was altered into a totally
God-centered life. Gertrud was twenty-five years old when she had
a visionary encounter with Jesus in a youthful figure, “about sixteen
years of age, handsome and gracious.” The time and place of her

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vision are important. She was in the dormitory, “as dusk was falling.” Gertrud had been worried for about a month. An older nun had just entered the room, and Gertrud bowed her head in veneration and respect, as is the custom. When she looked up again she saw the youthful figure. “Courteously and in a gentle voice,” he spoke to her. “Why are you so sad? Is it because you have no one to confide in that you are sorrowful?” Despite the fact that Gertrud was located in the dormitory, it appeared to her that she was in the Choir, “in the corner where I usually say my tepid prayers.” Then she heard these words: “I will save you. I will deliver you. Do not fear.” And then Gertrud saw his hands, “tender and fine,” holding her hand, “as though to plight a troth.” Then the young Jesus added: “With my enemies you have licked the dust (cf. Ps. 72:9) and sucked honey among thorns. Come back to me now, and I will inebriate you with the torrent of my divine pleasure (Ps. 35:9).” In the passage following these words the bridal mysticism of her writings is even more pronounced:

As he was saying this, I looked and saw, between him and me, that is to say, on his right and on my left, a hedge of such length that I could not see the end of it, either ahead or behind. The top of this hedge was bristling with such large thorns that there seemed no way to get back to the youth. As I hesitated, burning with desire and almost fainting, suddenly he seized me and, lifting me up with the greatest ease, placed me beside him. But on the hand with which he had just given me his promise I recognized those bright jewels, his wounds, which have canceled all our debts (Col. 2:14).

From now on she received numerous revelations. It is interesting to note that despite the cataphatic character of the vision as described above, Gertrud now and then uses a type of language, which clearly connects with the apophatic tradition. Writing about the necessity of following Christ, the soul can be led deeper into mystical union. Gertrud then formulates some phrases which have the clear mark of apophatic language, using concepts like the abyss and mystical death:

Let me be submerged in the abyss of the sea of your most merciful goodness. Let me perish in the deluge of your living love, as a drop of the sea dies in the depth of its fullness. Let me die, let me die, in the outpouring of your immense mercy, as dies the spark of flame in the irresistible force of the flood.17

Gertrud became known as a humble and wise woman, often visited for spiritual guidance. Her spirituality centers around the concept of love, God’s love to mankind—He loved us first—and, as a result of this gift, our love to God. But her writings are focused on the second person of the Trinity. God is love and Jesus is Gertrud’s spouse. Influenced by the Song of Songs, the Book of Esther, and the language of human love, Gertrud describes her spiritual experiences, sometimes in unvarnished erotic language. The bridegroom prefers to be alone with his bride, in the nuptial chamber, where they can “delight one another with the charm of intimate converse and tender embraces” (quoted in Marnau, 1993: 32f.; see also 28ff.).

In her later writings Gertrud did not ascribe her spiritual experiences such great importance. The more positive, tangible, cataphatic character of her descriptions altered into a more abstract, apophatic language. Could it be that one no longer is aware of one’s beloved in the kiss of embrace? Instead of using such tangible words, Gertrud prefers to speak about a sense of intimate, inspiring presence, a presence also to be experienced in events of everyday life—in different religious acts, in the sacraments, and in particular in holy communion (see Marnau, 1993: 40ff.).

Bridal mysticism belongs to the marks of medieval spirituality. Jesus as a young man appeared to her in a troublesome life situation. Gertrud does not mention the nature of her trouble. We will have to assume that she was a child of her time, influenced by what has been called the “new mysticism” (McGinn, 1998). It involved lively visualizations of the life of Jesus, especially the Passion. Considering these circumstances it comes as no surprise that Gertrud’s trouble found a solution in a vision of Jesus. According to the proposed model of interpretation, the vision can be described as an autosymbolic representation of her need of consolation. The content of the vision is clearly related to the spirituality of her time: bridal mysticism and visualization as a main spiritual exercise.

Concluding remarks

It is no easy task to offer plausible psychological models for the analysis of intense religious experiences. The complex human being appears to shun models as well as figures and tables. Although this article aims at a “grand theory” for mystical experience it does not, of course, give final answers. It rather points in a certain direction.
I invite colleagues to proceed on the suggested road. It is, after all, an important task for the psychology of religion to work for a better understanding of a group of experiences ranging from different types of meditation to visions and the experience of no-self (Roberts, 1985), the “root and center” of the religious life (James, 1902). I am convinced that the suggestions in this article bear some promise for the future. If we have holistic ambitions, then we cannot exclude depth psychology from a fuller understanding of these phenomena.

Primary process cognition and its manifestations, e.g. autosymbolic representations, clarify an important aspect of what has been called implicational coding. The interacting cognitive subsystems model offers deeper information about different subsystems, pertaining to, e.g. semantic and motor systems of coding. Mystical experiences, in the wide sense that has been used in this article, can be regarded as a result of a dialectical interplay between these different coding systems, or the marriage between Ego and Id.

References


VALUE PRIORITIES AND CONTENT OF RELIGIOSITY—NEW RESEARCH PERSPECTIVES

Carsten Gennerich & Stefan Huber

ABSTRACT

In this study the relationship of religiosity and value priorities is differentiated, based on a multidimensional measurement of different contents of religiosity. The structure of values is conceptualized using Schwartz’s (1992) two orthogonal dimensions of Self-transcendence vs. Self-enhancement and Openness to change vs. Conservation. The relations between these two dimensions and eight religious contents, ranging from open-minded to more close-minded forms of religiosity, were tested in a sample of church attenders (N = 685), gathered in Germany. The results show, that depending on the content of religiosity, different values are preferred (self-direction, universalism, benevolence, tradition and security values). The results indicate the importance of the content of religiosity for predicting value-loaded behaviors.

The relationship of value priorities and religiosity have recently received new attention (Fontaine et al., 2005; Saroglou et al., 2004; Schwartz & Huismans, 1995). Due to the integrative framework of Schwartz’s (1992) two-dimensional value conception more stable and clear results are being gained in these studies than in former research (cf., Rokeach, 1969).

Using Schwartz’s new value conception Schwartz and Huismans (1995) developed hypotheses within that framework: Considering theological, sociological and psychological research, they predict that religiosity correlates most positively with the value classes of tradition, conformity and security. The results confirm this hypothesis in four western religions (Israeli Jews, Spanish Roman Catholics, Dutch Calvinist Protestants and Greek Orthodox) and a representative German Sample, with the largest correlation of religiosity with tradition. A meta-analysis by Saroglou et al. (2004) leads to further confirmation on 21 samples from 15 countries (total N = 8551). This first new step to a solution of the relationship between religiosity and values leads to obviously stable results.

However, looking in a broader perspective on the religiosity-value relation the question seems not yet resolved (cf. Basset et al., 2001; Batson et al., 2001; Tarakeshwar et al., 2001). For example, when
Batson and his colleagues (1999, 2001) ask if religion is a source of universal compassion (i.e. a value of universalism) or rather of prejudice (as related to values of power), the question refers to the value-religiosity issue. As the ongoing discussion shows (cf. Bassett et al., 2001), the question still needs more clarification.

A possible step in this direction was taken by Fontaine and his colleagues (2005). They provide an analysis with a multi-dimensional measurement of religion. Using the Post-Critical Belief scale (Fontaine et al., 2003), consisting of the two dimensions of Exclusion vs. Inclusion of Transcendence and Literal vs. Symbolic approaches to religion, the authors can show that Inclusion of Transcendence correlates mainly with tradition (similar to the single-item scale in Schwartz & Huisman, 1995) and the dimension Literal vs. Symbolic in a nearly orthogonal way with the value conflict of universalism and benevolence on the one hand and security and power on the other hand. Thus, the relation of values and religiosity seem to be highly dependent on the individual’s interpretation of his or her religious tradition.

Expanding the research of Fontaine et al. (2005), we will analyze the relationship of values and religiosity using eight alternative contents of religiosity (religious pluralism, religious reflexivity, religious interest, general religiosity, worship attendance, social strength of religion, moral dualism, religious exclusivism) drawn from the “Structure-of-Religiosity-Test” (Huber, 2003a, 2003b, 2005). To achieve this goal, we will first present Schwartz’ theory of values and review additional results about the relation of various religiosity measures with single values (e.g., environmentalism, compassion). Finally, the hypotheses about the relations of different measures of religiosity with values orientations will be developed.

A universal content structure of values

Values were posited by Rokeach (1973) as the primary content of an individual’s identity. According to Rokeach, values function as cognitive standards for personal action. He contends that values are universal but are differentially esteemed. When the structure of values was addressed by Schwartz & Bilsky (1987), they hypothesized universal conflicts in the content of values. In 1992, Schwartz documented research in 20 countries which lead to a bipolar structure of 56 rated values in two orthogonal dimensions of Self-transcendence
vs. Self-enhancement and Openness to change vs. Conservation. The resulting circle of values represents the relativity of values: incompatible values are plotted far apart and similar ones are plotted close together (see figures in Schwartz, 1992). Multidimensional Scaling replicates this circular model also in terms of clusters of behaviors (Bardi & Schwartz, 2003). To assess the value preferences of individuals participating in this study, we used a short questionnaire with 14 bipolar rating items (Strack, 2001, 2004), utilizing the empirical content structure of the Schwartz value circle (see Figure 1).

In terms of the classical differentiation of value segments the items are assigned in the following way: Benevolence (from ‘honest’ to ‘devout’), Tradition (from ‘social order’ to ‘respect for the elderly’), Security (from ‘politeness’ to ‘control over uncertainty’), Power (from ‘preserving public image’ to ‘authority’), Achievement (from ‘wealth’ to ‘success’), Hedonism (from ‘pleasure’ to ‘enjoying life’), Stimulation (from ‘exciting life’ to ‘daring varied life’), Self-direction (from ‘choose own goals’ to ‘openness’), Universalism (from ‘tolerance’ to ‘social justice’). Thus, the correlation pattern with the two value-dimensions and its visualization in our plots, allows to estimate the relation to these specific value segments.

Single values and their relations to different contents of religiosity

In the recent discussion of the value-religiosity-relationship single value studies seem to be neglected, i.e. studies which analyze the relationship of a specific value or virtue with religion. Two perspectives should to be considered: (a) Probably the additional studies provide new insight for the discussion and (b) the dependency of these results on the contents of religiosity can be newly reflected.

Looking for relationships with universalism values

Karpov (2002) analyzed the relationship of religiosity and tolerance. In the Schwartz’ value frame tolerance is a universalistic value and intolerance as its opposite is linked to power (cf. Schwartz, 1992 or Figure 1). The results show, that intolerance is primarily linked to theocratic beliefs (trust in the church, complaints about limited power of the church), but less to measures of worship attendance and religious commitment. Thus, the result, that intolerance is best predicted
with theocratic beliefs, is not surprising because of the notion of power in this measure. Due to a lack of measures of universalistic religiosity a positive relation of tolerance and religiosity could not be provided.

Tarakeshwar et al. (2001) analyzed the relation of two different measures of religiosity with environmentalism (i.e., universalism, Schwartz, 1992). “Orthodox religious beliefs”, measured by thirteen items (e.g., only followers of Jesus Christ can be saved) correlates negatively with environmentalism \( r = -0.13 \) to \(-0.32\), whereas “Sanctification of environment”, measured by two items (nature is sacred because it was created by God; humans beings should respect nature because is was created by God), correlates positive with environmentalism \( r = 0.12 \) to 0.15. The results are in line with previous research: The value of power in opposition to universalism is linked to religious fundamentalism (Altemeyer & Hunsberger, 2004), which is similarly operationalized as the “Orthodox religious beliefs scale”. The link of the sanctification measures with environmentalism is reasonable because of their semantic similarity. Interestingly, the sanctification items are not less orthodox in a theological perspective, thus the correlation pattern depend on the single- vs. broad-minded interpretation of the biblical motif. Further results by Eckberg & Blocker, 1997, Guth et al. (1995), Schultz et al. (2000) and Wolkomir et al. (1997) confirmed the negative correlation of religious fundamentalism (measures with literal beliefs in the bible) with environmental concerns, whereas church attendance correlates far less negatively or even positively with environmentalism (Eckberg & Blocker, 1996; Guth et al., 1995; Kanagy & Willits, 1993). It is no surprise then, that those who identified with liberal denominations (Nooney et al., 2003) and those with a pro-environmental theology (e.g., “I can draw close to God through creation”; Orchard, 1997) relate positively to a pro-environmental worldview.

Looking for relationships with benevolence values

Religiosity (church attendance and self-rated religiousness) and forgiveness as a value are consistently related (McCullough & Worthington, 1999; Mullet et al., 2003). While forgiveness is classified as a benevolence value (Schwartz, 1992), the relation is reasonable because of the strong relation of self-rated general religiosity with tradition, which is similar to benevolence values (e.g., Fontaine et al., 2005).
The relationship between religiosity and prosocial behavior is controversial. Spontaneous helping behavior is not linked to religiosity, but is linked to quest religion (Annis, 1976; Hansen et al., 1995). On the other side volunteering in institutional settings and intrinsic religiosity is positive related (Hansen et al., 1995; Küpper & Bierhoff, 1999). Mixed results are reported on the willingness of religious people to help value violators in the sense of universal compassion (Bassett et al., 2001; Baston et al., 1999, 2001; Goldfried & Miner, 2002), but overall quest orientation seem to promote universal compassion (Batson et al., 1999, 2001) and to reduce prejudice (Batson & Burris, 1994).

*Looking for relationships with achievement values*

As Saroglou et al. (2004) showed, religiosity is negatively related to achievement values. This is in line with Ray (1982) who found that nonbelievers score higher on Protestant work ethic. Positive correlations seem to be reduceable to the anti-leisure and asceticism component of the Protestant Work Ethic measure, whereas success and hard-work are not related to religiosity (McHoskey, 1993).

To summarize the analysis of the religiosity-value relations there is a clear pattern:

a) More conservative measures such as theocratic and orthodox beliefs are related negatively to environmentalism and tolerance. Based on Schwartz’ value circle, where environmentalism and tolerance is opposed to security and power values, we predict that measures of more conservative or authoritarian forms of religiosity are positively related to power and security values.

b) Measures of general or intrinsic religiosity are weakly related to or not related with intolerance, environmentalism, but positively related to volunteering. Note that volunteering is a prosocial value and that there seems to be no general relation of religiosity with the values conflict of universalism vs. power. Thus we predict, that general measures of religiosity will be related to prosocial values.

c) Quest religion is related to environmentalism, spontaneous helping and low prejudice. Thus, we predict that measure of quest religion are positively related to universalism.
Method

Samples
The sample \((N = 685)\) was assembled in five Catholic, five Protestant and six independent parishes of a middle size town in Germany. The questionnaires were distributed during a Sunday worship, accordingly the sample is highly religious compared to the population. Other characteristics of the sample are relatively equally distributed. Age was distributed as followed: 15% (age 14–29), 22% (age 30–44), 25% (age 45–59), 27% (age 60–74) and 11% (75 and older). The sample consists of 409 females (60%) and 275 males (40%).

Measures of values
The personal value preferences were assessed by the 14BiPole-Value questionnaire (Strack, 2001, 2004). Participants had to decide on a bipolar five point scale which of two values per item they preferred. For this study we decided to rely on norm data (Strack, 2001). Based on factor analysis of the norm data, we computed the “factor-scores” for this study with the same equation. The factors of the norm data resemble the dimensions of “Self-transcendence vs. Self-enhancement” and “Openness to change and Conservation” (see Figure 1).

Measures of contents of religiosity
The scales for the measurement of different contents of religiosity were drawn from the “Structure-of-Religiosity-Test” (S-R-T), which is designed for a systematically measurement of a variety of contents of religiosity (Huber, 2003a, 2003b, 2005). The selected S-R-T-scales range from measures of open-minded forms of religiosity to more conservative or authoritarian forms (all scales are presented in the appendix). The open-minded forms of religious orientation are represented by the scales of ‘religious pluralism’, ‘religious reflexivity’ and ‘religious interest’. These scales are designed for the differentiation of Batson’s quest concept. Similar to Beck & Jessup’s (2004) broad multidimensional measurement of Batson’s quest concept, the scales should measure the range from a self-directed approach to religion up to a religious orientation, which is related to universalistic and benevolent values.

Conservative and authoritarian forms of religiosity were measured by means
of short scales related to the concepts of ‘social strength’ of religiosity, ‘moral dualism’ and ‘religious exclusivism’. This was inspired by the contents of the Altemeyer & Hunsberger (2004) religious fundamentalism scale and Perrin & Mauss’ (1993) differentiation between social strength and strictness in the investigation of religious fundamentalism.

As in other studies on the value-religiosity relation, general religiosity was measured with a single-item scale (see Saroglou, 2004), but also with a measure of worship attendance as a further common indicator (cf., Batson & Burris, 1994).

**Results**

As shown in Table 1 and visualized in Figure 2 the results confirm the predicted correlation pattern based on our analysis of previous research.
Table 1  Alpha coefficients and correlations with Self-transcendence vs. Self-enhancement and Openness to change vs. Conservation

<table>
<thead>
<tr>
<th>Religiosity scales</th>
<th>Alpha coefficients</th>
<th>Self-transcendence vs. Self-enhancement Correlations</th>
<th>Openness to change vs. Conservation Correlations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pluralism</td>
<td>.88</td>
<td>.04</td>
<td>.21</td>
</tr>
<tr>
<td>Reflexivity</td>
<td>.76</td>
<td>.21</td>
<td>.14</td>
</tr>
<tr>
<td>Interest</td>
<td>.81</td>
<td>.25</td>
<td>-.13</td>
</tr>
<tr>
<td>General</td>
<td>Single item</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Religiosity</td>
<td></td>
<td>.18</td>
<td>-.21</td>
</tr>
<tr>
<td>Worship attendance</td>
<td>.93</td>
<td>.11</td>
<td>-.27</td>
</tr>
<tr>
<td>Social strength</td>
<td>.80</td>
<td>.07</td>
<td>-.31</td>
</tr>
<tr>
<td>Dualism</td>
<td>.84</td>
<td>.05</td>
<td>-.36</td>
</tr>
<tr>
<td>Exclusivism</td>
<td>.83</td>
<td>-.04</td>
<td>-.30</td>
</tr>
</tbody>
</table>

Figure 2  Correlation-plot of the religiosity scales with the two dimensions of the value circle.
The measures of more conservative religiosity plot mainly in the area of values of security and tradition. The scale of religious exclusivism is mostly related to control of uncertainty (see Figure 1). It correlates with the dimension of Self-transcendence vs. Self-enhancement with $r = -0.04$ and with the dimension of Openness to change vs. Conservation with $r = -0.30$. Moral dualism plots somewhere between security values and values of tradition. It correlates with Self-transcendence and Conservation $r = 0.05$ and $r = -0.36$. The scale of social strength of religiosity plots clearly in the area of tradition values. Its relation to Self-transcendence is $r = 0.07$ and to Conservation $r = -0.31$.

The single items scale of general religiosity plots between the value segments of Benevolence and Tradition with a correlation of $r = 0.18$ with the dimension of Self-transcendence vs. Self-enhancement and $r = -0.21$ with the dimension of Openness to change vs. Conservation.

Looking at the worship attendance scale, we see that it plots far more in the middle of the area of tradition ($r = 0.11$ and $-0.27$ with both dimensions). Evidently, both measures of religiosity could produce different result in correlation studies.

The correlation pattern of the quest related scales show a considerable range in their relationship to values, ranging from self-direction and universalism to benevolence.

Religious interest scale. The dimension of interest plots clearly in the segment of benevolence ($r = 0.25$ and $-0.13$ with both value dimensions).

Ability for Religious reflexivity. Religious reflexivity correlates with $r = 0.21$ with the dimension of Self-transcendence vs. Self-enhancement and with $r = 0.14$ with the dimension of Openness to change vs. Conservation. Looking on Figure 2, the scale of religious reflexivity correlates most with the value-segment of universalism.

Religious pluralism. The scale correlates mainly with the value segment of self-direction (see Figure 2). The correlation pattern is $r = 0.04$ with the dimension of Self-transcendence vs. Self-enhancement, but $r = 0.21$ with the dimension of Openness to change vs. Conservation.

Discussion

As predicted, the results of the study shows that the single item measure of religiosity correlates within the area of values of benevolence and tradition. The results of the recent meta-analysis of Saroglou
(2004) are confirmed. The various scales, ranging from of religious quest to conservative religiosity clearly show a differentiation of the relationship of religiosity and value preferences. Measurements of conservative religiosity correlate clearly with values of tradition and security and measurements of quest religiosity with self-direction, universalism and benevolence.

In relation to the analysis of the religiosity-value relationship conducted by Fontaine et al. (2005) the selected S-R-T scales of conservative religiosity represent the literal-pole of the symbolic vs. literal approach to religion relatively well. On the other side, the scale of religious reflexivity correlates in a similar way with universalism values as did the symbolic approach to religion (cf. Fontaine et al., 2005). Thus, a literal interpretation of religious text seems more common among religiously conservative subjects.

The value patterns give some hints to the interpretation of the different forms of religiosity. Conservative religiosity or religious fundamentalism is related to the need for security. This confirms the interpretation of Hood & Morris (1985), that fundamentalism is concerned with boundary maintenance and the internal stabilization of the religious system based on the principle of intratextuality (Hood et al., 2005). The interpretation of fundamentalism as systems stabilization sheds light on its necessity: without some kind of protection of basic beliefs religious systems break down (Grünschloß, 1999).

The link of religious quest with universalism can be explained with boundary transgressions. Questioning, as well as reflexivity, challenges existing psychological and religious beliefs, and thus opens one up for other perspectives and dialogue. Thus, our scales of pluralism, religious reflexivity and interest could represent the principle of intertextuality of nonfundamentalist religiosity, because all three attitudes could promote a way of interpretation, in which each text fundamentally deepens the understanding of others.

Furthermore, the location of religious pluralism on the left side of the circle is interesting (see Figure 2). It plots clearly in opposition to the scale of social strength of religion. Thus, religious pluralism seems to be related to religious indifference. The combination of religious commitment and appreciation of truth in other religions seems hard to find. However, religious reflexivity can provide a solution to this dilemma. It’s both distinct from and related to pluralism and measures of religious involvement.
Looking at the plot of the eight correlations in Figure 2, one may ask, if religiosity in the area of self-enhancement values should be measured. One possible solution would be to reverse the coding of the scales. For example, a way of religious interpretation clearly related to the area of power values would thus be the denial of reflexivity or of the relativity of interpretations. In the area of values of stimulation, hedonism and achievement would plot measures of nonreligiosity. One might also consider if the measure of extrinsic religiosity could plot here. But existing scales name mainly the experience of community and relief as extrinsic motives (cf. Kirkpatrick, 1989; Maltby & Lewis, 1996). In our view, it is worthwhile constructing a scale for the hedonistic aspect of extrinsic religiosity (e.g., “A worship service must be a lot of fun” or “With my religion I must not look bad”).

**General Conclusion**

In congruence with other studies about the multidimensional relationship between values and religiosity this study gives evidence that religion can promote a broad range of values, i.e. from self-direction and universalism and benevolence to tradition and security. Which values are promoted by religiosity depends on the way of being involved in religion. Conservative religious interpretations are related to security and tradition values and the reflexive and liberal interpretations to universalism and self-direction. Persons, who assess themselves in a more general way as religious seem to balance dialogical openness and system stabilization, thus these persons are related to both benevolent and traditional values.

**Appendix**

General religiosity (single item)
Would you say that you are religious or rather non-religious? On the scale below please rate your answers between 1 and 10.

Religiosity scales from the “Structure-of-Religiosity-Test” (Huber 2003b, 2005)
Religious Pluralism
For me every religion has a core of truth.
I believe that one should be open to all religions.
In my opinion every religion contains valuable teachings.

Religious reflexivity
How important is it for you, to consider religious questions from different points of view?
How often are you critical of some aspects of religious teachings of your faith?
How often do you ever rethink certain aspects of your religious views?

Religious interest
How interested are you in learning more about religious questions?
How often do you think about religious questions?

Worship attendance
How important is it to you, to take part in religious services?
As a rule, how often do you take part in religious services (including radio and/or TV services)?

Social strength
I am prepared to make great sacrifices for my religion if need be.
As far as possible, I try to adhere to all the recommendations made by leaders of my religion.
I try to win over as many people to my religion as possible.

Moral dualism
For my faith it is important to be constantly vigilant towards evil.
For my faith it is important to distinguish clearly between good and evil.
For my faith it is important that I resolutely fight against evil.

Religious exclusivism
I am convinced that in questions of religion, my own religion is right and that other religions tend to be wrong.
I am searching for deeper relationships especially with people of my own religion.
I am convinced that members of my religion will be saved above all.
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the International Association for the Psychology of Religion, August 28th–31th, 2003 in Glasgow, Scotland.


SKEPTICAL SAINTS AND CRITICAL COGNITION: ON THE RELATIONSHIP BETWEEN RELIGION AND PARANORMAL BELIEFS

Douglas S. Krull & Eric S. McKibben*

ABSTRACT

The literature on the relationship between religion and belief in the paranormal is complex and sometimes seemingly contradictory. However, previous research suggests that this relationship depends on the religious characteristics of the sample and the measures of religion. Research also suggests that science knowledge is unrelated to paranormal beliefs, but critical thinking is at odds with paranormal beliefs. Psychology college students and conservative Christians answered questions about paranormal beliefs, religious beliefs, Bible knowledge, science knowledge, and evidence-based thinking. Conservative Christians displayed the lowest belief in the paranormal. Religious beliefs and paranormal beliefs were unrelated, but attendance at services was negatively related to paranormal beliefs. Evidence-based thinking was also negatively related to paranormal beliefs.

Belief in the paranormal (i.e., pseudoscience, New Age) seems to be quite widespread. Rice (2003) found that 60.1% of his national sample believed in ESP and 35.2% believed that extraterrestrials have visited earth. Orenstein (2002) found that 54.5% of his Canadian national sample believed in psychic powers and 42.4% reported personal experience with precognition. Sparks and Miller (2001), in their sample of 200 participants from a medium-sized Midwest city, found that 34% believed that people have seen flying saucers from outer space, 45.5% believed that people have seen ghosts, and 35.5% believed that some people have psychic abilities that enable them to help police solve crimes by touching objects that belonged to the victims. Perhaps to the surprise of some scholars, such beliefs do not seem to be uncommon among those who are highly educated and interested in science. For example, Evans (1973) reported that 67% of

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his sample of *New Scientist* readers indicated that ESP was likely or a fact. The prevalence of paranormal beliefs has caused no little concern among the skeptical community. However, scientists of religion may be more interested in the interplay between religion and paranormal beliefs.

The literature on the relationship between religion and belief in the paranormal is complex with many apparently conflicting findings (see e.g., Rice, 2003), but at least three conclusions do seem warranted. First, religion seems to be positively related to some paranormal beliefs, but negatively related to others (e.g., Grimmer & White, 2001; Tobacyk & Milford, 1983). For example, Williams, Taylor, and Hintze (1989) found that pure intrinsics (high on intrinsic religiosity, low on extrinsic religiosity) tended to be higher on belief in precognition but lower on belief in astrology. Second, how religion is operationalized affects the relationship between religion and belief in the paranormal. For example, Orenstein (2002; see also McKinnon, 2003) found that religious beliefs were positively related to paranormal beliefs, but service attendance was negatively related. Third, the relationship between religion and belief in the paranormal depends on the type of religion under consideration. For example, members of liberal denominations seem to be higher than members of conservative denominations in paranormal beliefs (e.g., Donahue, 1993). People who report mystical experiences also show higher levels of paranormal belief (e.g., Thalbourne & Delin, 1999). Recent research by Bainbridge (2004) suggests that the relationship between religion and paranormal beliefs may be curvilinear; both the extremely religious and the extremely nonreligious (Atheists in particular) seem to be low in paranormal beliefs compared to others.

Although the research on the relationship between religion and belief in the paranormal is both informative and fascinating, much of the work has relied on self-report measures of religiosity. Research indicates that people tend to inflate their religious involvement (e.g., Hadaway, Marler, & Chaves, 1993). As such, whereas people who claim to be nonreligious probably really are nonreligious, at least some people who claim to be very religious may not be. Thus, it may be informative to recruit and investigate individuals who seem to be particularly devout based on criteria other than self-report. How might the degree of belief in the paranormal for such individuals differ from that of less religious individuals? A primary goal of the current research was to investigate this question.
A second goal of the research was to investigate evidence-based thinking. Recent research suggests that several variables that one might have expected to be at odds with paranormal beliefs do not seem to be. For example, science knowledge does not seem to immunize people against paranormal beliefs (e.g., Hoekstra, Yoder, Walker, & Vogl, 2003; but see Mill, Gray, & Mandel, 1994). Need for Cognition also seems to be unrelated to belief in the paranormal (e.g., Deeb, Vogl, McGee, Walker, & Hoekstra, 2002), as does logical reasoning (Fitzgerald, Vogl, Walker, & Hoekstra, 2003). Remarkably, an interest in science is positively correlated with paranormal beliefs (e.g., Walker, Vogl, & Hoekstra, 2001), suggesting that people may fail to distinguish between science and the paranormal, and analytical individuals hold stronger beliefs in the paranormal than do intuitive individuals (e.g., Hoekstra & Walker, 2002). Walker, Hoekstra, and Vogl (2002) have suggested that science education does not reduce paranormal beliefs because, although students may learn what to think, they do not learn how to think. Consistent with this, research suggests that critical thinking is negatively related to paranormal beliefs (Gray & Mill, 1990) and, although science knowledge may be unrelated to paranormal beliefs, scientific reasoning is at odds with paranormal beliefs (Hoekstra et al., 2003). The current research included items designed to tap the degree to which people think decisions should be based on evidence. How might more religious and less religious individuals compare on the degree to which they endorse such evidence-based thinking? Might evidence-based thinking be negatively related to paranormal beliefs? The current research also investigated these questions.

Investigation 1

Method

Participants. Ninety-two students were recruited from upper and lower division psychology courses at a midwestern regional university. In addition, 27 participants were recruited from a nearby religious meeting. This religious meeting was sponsored by a local congregation of the church of Christ and was particularly designed to encourage adolescents and young adults. This provided a good opportunity to recruit college-age participants. The church of Christ is a conservative religious group (e.g., Bainbridge & Stark, 1980). Moreover, many
attendees had traveled some distance to attend this multiple-day religious meeting, suggesting that they were quite dedicated with regard to religious matters. Data presented below on attendance at religious services, charitable giving, and Creation/Evolution beliefs were consistent with this characterization.

**Procedure.** The students recruited from psychology courses completed the questionnaire in their classrooms. The Christians recruited from the religious meeting completed the questionnaire in an auditorium after an evening service. With the permission of the organizers of the meeting, one of the researchers requested participants, particularly those of approximately college age.

**Dependent measures.** Participants indicated their degree of belief in 12 areas of the paranormal (astrology, crystals, channeling, the zodiac, ghosts, ESP: precognition, ESP: telekinesis/psychokinesis, ESP: telepathy, palm-reading, crystal balls, UFOs, Bigfoot/sasquatch/ yeti/abominable snowman), using a nine-point scale anchored with the phrases *Strongly Do NOT Believe* and *Strongly Believe*. A one-sentence description was given for each. For example, the description for precognition was: *That some people have psychic abilities that enable them to know the future.*

Participants indicated their degree of belief in eight doctrines of Christianity (God, heaven, hell, angels, the Devil/Satan, inspiration of the Bible, the resurrection of Jesus Christ) using the same nine-point scale used for the paranormal belief items. Each of these was also accompanied by a one-sentence description. For example, the description for prayer was: *That praying to God can affect events.*

Participants answered 12 multiple-choice Bible knowledge questions (e.g., Who was very strong until his hair was cut?, Which verse says that faith comes by hearing, and hearing by the word of God?, Which book describes how God led the people of Israel out of Egypt?), and were asked to try to answer correctly regardless of their belief in the Bible. Although one can have religious knowledge without being religious, these questions might provide an interesting measure of religiosity that is not subject to social desirability.

Participants answered 12 multiple-choice science knowledge questions (e.g., Which is a correct description of the organization of subatomic particles in atoms?, The process of trapping light energy and converting it to chemical energy is called:, Which of the following would be included in the hydrologic system?). Introductory level questions were obtained from faculty members in Biology, Chemistry, and Geology. An attempt was made to select questions that one
Participants indicated their degree of agreement with 12 evidence-based thinking items (e.g., If you want to decide which of two views is better, it is a good idea to consider the evidence for both sides. On issues where there is disagreement, a good way to get at the truth is to take a poll to determine which position the majority of experts believe [reversed]., Ideas are not very useful unless there is a way to determine whether or not the ideas are true.; see appendix A for a complete list), using a nine-point scale anchored with the phrases Strongly Disagree and Strongly Agree. These items were derived from suggestions by Sagan (1996; see also Johnson, 1997).

Participants also completed several demographic questions (e.g., age), questions about religious practices (e.g., attendance at services), questions about moral issues (e.g., charitable giving), and additional questions (e.g., Creation/Evolution beliefs), some of which are only tangentially related or unrelated to this manuscript.

**Results and Discussion**

The data provided information about how the participants from the religious meeting differed from the psychology students as well as information about the relationships between the variables of interest. These findings are described briefly.

**Differences Between Groups**

Analyses were conducted to determine how the participants from the religious meeting differed from those recruited from psychology courses. However, because psychology students also differ in how religious they are, it seemed useful to divide the psychology sample into those who were more or less religious. Several variables could be used. Attendance at religious services was chosen because it provided a clear division. Of the 92 psychology students, 43 indicated that they attended no services in a typical month. The remaining 49 psychology participants indicated that they attended at least one service ($M = 3.39$ services/month, $SD = 2.32$). For comparison, the twenty-seven religious meeting participants indicated that they attended 12.00 services ($SD = 2.70$) in a typical month, $F(2, 113) = 311.27, p = .001$.

To provide additional comparison information, the participants from the religious meeting indicated greater monthly charitable giving ($M = $145.43) than either the psychology students who reported
attending services ($M = $38.27) or those who did not ($M = $8.79), $F(2, 108) = 24.17, p = .001$. And, with regard to Creation/Evolution beliefs, nearly all religious meeting participants endorsed young earth creation, but psychology students who reported attending services tended to favor old earth creation and those who did not report attending services tended to favor theistic evolution, $F(2, 112) = 43.33, p = .001$. Thus, it appears that the participants from the religious meeting were quite different, based on both their presence at the meeting as well as these self-report measures.

Indices were created for the five variables of interest (paranormal beliefs, religious beliefs, Bible knowledge, science knowledge, and evidence-based thinking). Although the overall means were not of primary concern, it was interesting to note that participants endorsed religious beliefs ($M = 7.65$) to a much greater degree than paranormal beliefs ($M = 2.66$), $F(1, 118) = 402.46, p = .001$. Participants showed moderate levels of Bible knowledge ($M = 54\%$) and science knowledge ($M = 62\%$), and moderate agreement with the evidence-based thinking statements ($M = 6.48$). The paranormal items hung together very well ($\alpha = .92$), as did the religious beliefs ($\alpha = .95$). The Bible questions hung together acceptably well ($\alpha = .75$). The science questions had relatively poor reliability ($\alpha = .50$), although this is not surprising given the breadth of the domain. The evidence-based items also had relatively poor reliability ($\alpha = .46$), suggesting that evidence-based thinking may be a constellation of skills rather than a unitary construct. Nevertheless, as described below, these items still proved useful.

These three groups (two psychology student groups, one religious meeting group) were compared on the five indices (paranormal beliefs, religious beliefs, Bible knowledge, science knowledge, and evidence-based thinking). Because previous research has found that the relationship between religion and belief in the paranormal depends on the specific paranormal belief, comparisons were also conducted for

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1 Results were similar if adjusted for income.
2 Young earth creation, old earth creation, theistic evolution, and naturalistic evolution were treated as a four-point scale for this analysis.
3 Religious meeting participants also tended to be somewhat older, but not significantly so ($Ms = 27.37, 23.93, 23.44$, respectively), $F(2, 113) = 2.25, p = .110$.
4 The reliability of the evidence-based thinking index increases to $.57$ if the statement designed to tap an understanding of Occam’s Razor (statement 5 in Appendix A) is deleted. The results are much the same if this item is deleted.
the individual paranormal belief items. What should be expected? As described earlier, previous research suggests that both extremely religious individuals and more conservative religious individuals display lower paranormal beliefs, but some participants in this prior research may have overestimated their religious involvement. This may have had the effect of obscuring even more dramatic differences in paranormal belief. Thus, participants from the religious meeting should be low in paranormal beliefs, perhaps even lower than what has been found in research that has categorized participants using self-report measures. It should be noted that some very religious individuals, such as those who are high in intrinsic religiosity, have been found to be high in some paranormal beliefs (e.g., precognition). As such, some variability might be expected in the degree to which the religious meeting participants are lower in paranormal beliefs. In contrast, strong and consistent differences in paranormal beliefs were not expected between the two psychology student groups.

As shown in Table 1, on the five indices the two psychology student groups differed only in their religious beliefs, but the participants from the religious meeting differed from both other groups except in science knowledge, where there were no significant differences, and religious beliefs, where the meeting participants only differed from the less religious psychology students. Of particular interest, the participants from the religious meeting had lower paranormal beliefs (\(M = 1.17, SD = 0.31\)) than either the psychology students who reported attending services regularly (\(M = 2.90, SD = 1.36\), \(F(1, 72) = 41.93, p = .001\)), or those who did not (\(M = 3.29, SD = 1.75\), \(F(1, 67) = 38.92, p = .001\)).

The same pattern held in most cases with regard to the specific paranormal beliefs. For 10 of the 12 paranormal beliefs, religious meeting participants differed from both of the psychology student groups and the psychology student groups did not differ from one another. The two exceptions were the belief in crystals (that wearing crystals alters peoples’ health or behavior), where there were no significant differences, and the belief in crystal balls, where the only significant difference was between the less religious psychology student group and the religious meeting group. An inspection of the means reveals that these paranormal beliefs were endorsed to the least degree with overall means below two on a nine-point scale. Because so few people hold these beliefs, it is perhaps not surprising that significant differences were not obtained.
Table 1  Mean Differences

<table>
<thead>
<tr>
<th>Variable</th>
<th>Psychology [0 services]</th>
<th>Psychology [1+ services]</th>
<th>Religious Meeting</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paranormal Beliefs</td>
<td>3.29&lt;sub&gt;a&lt;/sub&gt;</td>
<td>2.90&lt;sub&gt;b&lt;/sub&gt;</td>
<td>1.17&lt;sub&gt;ab&lt;/sub&gt;</td>
<td>2.64</td>
</tr>
<tr>
<td>SD</td>
<td>1.75</td>
<td>1.36</td>
<td>0.31</td>
<td>1.60</td>
</tr>
<tr>
<td>Religious Beliefs</td>
<td>6.51&lt;sub&gt;ab&lt;/sub&gt;</td>
<td>7.99&lt;sub&gt;a&lt;/sub&gt;</td>
<td>8.94&lt;sub&gt;b&lt;/sub&gt;</td>
<td>7.67</td>
</tr>
<tr>
<td>SD</td>
<td>2.44</td>
<td>1.69</td>
<td>0.22</td>
<td>2.05</td>
</tr>
<tr>
<td>Science Knowledge</td>
<td>0.59</td>
<td>0.63</td>
<td>0.67</td>
<td>0.62</td>
</tr>
<tr>
<td>SD</td>
<td>0.15</td>
<td>0.19</td>
<td>0.19</td>
<td>0.18</td>
</tr>
<tr>
<td>Bible Knowledge</td>
<td>0.42&lt;sub&gt;a&lt;/sub&gt;</td>
<td>0.47&lt;sub&gt;b&lt;/sub&gt;</td>
<td>0.84&lt;sub&gt;ab&lt;/sub&gt;</td>
<td>0.54</td>
</tr>
<tr>
<td>SD</td>
<td>0.21</td>
<td>0.18</td>
<td>0.12</td>
<td>0.25</td>
</tr>
<tr>
<td>Evidence-Based</td>
<td>6.22&lt;sub&gt;a&lt;/sub&gt;</td>
<td>6.10&lt;sub&gt;b&lt;/sub&gt;</td>
<td>7.55&lt;sub&gt;ab&lt;/sub&gt;</td>
<td>6.48</td>
</tr>
<tr>
<td>SD</td>
<td>0.77</td>
<td>0.70</td>
<td>0.87</td>
<td>0.96</td>
</tr>
<tr>
<td>Astrology</td>
<td>3.30&lt;sub&gt;a&lt;/sub&gt;</td>
<td>2.87&lt;sub&gt;b&lt;/sub&gt;</td>
<td>1.46&lt;sub&gt;ab&lt;/sub&gt;</td>
<td>2.72</td>
</tr>
<tr>
<td>SD</td>
<td>2.39</td>
<td>2.03</td>
<td>1.17</td>
<td>2.13</td>
</tr>
<tr>
<td>Crystals</td>
<td>2.19</td>
<td>1.87</td>
<td>1.35</td>
<td>1.87</td>
</tr>
<tr>
<td>SD</td>
<td>1.62</td>
<td>1.47</td>
<td>1.09</td>
<td>1.48</td>
</tr>
<tr>
<td>Channeling</td>
<td>3.63&lt;sub&gt;a&lt;/sub&gt;</td>
<td>3.00&lt;sub&gt;b&lt;/sub&gt;</td>
<td>1.08&lt;sub&gt;ab&lt;/sub&gt;</td>
<td>2.80</td>
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<td>SD</td>
<td>2.46</td>
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<td>0.27</td>
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<td>Zodiac</td>
<td>4.60&lt;sub&gt;a&lt;/sub&gt;</td>
<td>3.89&lt;sub&gt;b&lt;/sub&gt;</td>
<td>1.04&lt;sub&gt;ab&lt;/sub&gt;</td>
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<tr>
<td>SD</td>
<td>3.04</td>
<td>2.71</td>
<td>0.20</td>
<td>2.87</td>
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<tr>
<td>Ghosts</td>
<td>4.72&lt;sub&gt;a&lt;/sub&gt;</td>
<td>4.43&lt;sub&gt;b&lt;/sub&gt;</td>
<td>1.44&lt;sub&gt;ab&lt;/sub&gt;</td>
<td>3.85</td>
</tr>
<tr>
<td>SD</td>
<td>2.91</td>
<td>2.75</td>
<td>1.37</td>
<td>2.87</td>
</tr>
<tr>
<td>ESP [Precognition]</td>
<td>4.21&lt;sub&gt;a&lt;/sub&gt;</td>
<td>3.98&lt;sub&gt;b&lt;/sub&gt;</td>
<td>1.19&lt;sub&gt;ab&lt;/sub&gt;</td>
<td>3.42</td>
</tr>
<tr>
<td>SD</td>
<td>2.64</td>
<td>2.47</td>
<td>0.40</td>
<td>2.55</td>
</tr>
<tr>
<td>ESP [Telepathy]</td>
<td>3.63&lt;sub&gt;a&lt;/sub&gt;</td>
<td>2.96&lt;sub&gt;b&lt;/sub&gt;</td>
<td>1.11&lt;sub&gt;ab&lt;/sub&gt;</td>
<td>2.78</td>
</tr>
<tr>
<td>SD</td>
<td>2.69</td>
<td>2.06</td>
<td>0.32</td>
<td>2.29</td>
</tr>
<tr>
<td>ESP [Telekinesis]</td>
<td>2.49&lt;sub&gt;a&lt;/sub&gt;</td>
<td>2.49&lt;sub&gt;b&lt;/sub&gt;</td>
<td>1.04&lt;sub&gt;ab&lt;/sub&gt;</td>
<td>2.15</td>
</tr>
<tr>
<td>SD</td>
<td>1.74</td>
<td>1.98</td>
<td>0.19</td>
<td>1.74</td>
</tr>
<tr>
<td>Palm-Reading</td>
<td>2.63&lt;sub&gt;a&lt;/sub&gt;</td>
<td>2.23&lt;sub&gt;b&lt;/sub&gt;</td>
<td>1.00&lt;sub&gt;ab&lt;/sub&gt;</td>
<td>2.09</td>
</tr>
<tr>
<td>SD</td>
<td>2.25</td>
<td>1.89</td>
<td>0.00</td>
<td>1.91</td>
</tr>
<tr>
<td>Crystal Balls</td>
<td>1.84&lt;sub&gt;a&lt;/sub&gt;</td>
<td>1.36</td>
<td>1.00&lt;sub&gt;a&lt;/sub&gt;</td>
<td>1.46</td>
</tr>
<tr>
<td>SD</td>
<td>1.63</td>
<td>0.79</td>
<td>0.00</td>
<td>1.15</td>
</tr>
<tr>
<td>UFOs</td>
<td>3.88&lt;sub&gt;a&lt;/sub&gt;</td>
<td>3.26&lt;sub&gt;b&lt;/sub&gt;</td>
<td>1.26&lt;sub&gt;ab&lt;/sub&gt;</td>
<td>3.03</td>
</tr>
<tr>
<td>SD</td>
<td>2.75</td>
<td>2.21</td>
<td>0.71</td>
<td>2.41</td>
</tr>
<tr>
<td>Bigfoot</td>
<td>2.40&lt;sub&gt;a&lt;/sub&gt;</td>
<td>2.45&lt;sub&gt;b&lt;/sub&gt;</td>
<td>1.12&lt;sub&gt;ab&lt;/sub&gt;</td>
<td>2.13</td>
</tr>
<tr>
<td>SD</td>
<td>1.95</td>
<td>1.93</td>
<td>0.33</td>
<td>1.79</td>
</tr>
</tbody>
</table>

Note. Means that share a subscript are significantly different (Bonferroni).
Relationships Between Variables

Because the psychology participants and the participants from the religious meeting were quite different, correlations are presented for the entire sample and for the psychology students alone. There were probably too few religious meeting participants for representative correlations (indeed, several looked questionable, such as religious belief and service attendance being negatively correlated), so these are not presented.

As shown in Table 2, a number of interesting correlations emerged between the five indices. The number of services attended in a typical month was also included. Recent research has found attendance at services to be negatively related to paranormal beliefs (e.g., Orenstein, 2002; McKinnon, 2003) and it was in the current data as well. Religious beliefs and paranormal beliefs were not significantly correlated. However, similar to Orenstein’s (2002) findings, there was some evidence that religious beliefs and attendance at services have opposing effects. In the total sample, the correlation between paranormal beliefs and service attendance remained essentially unchanged (increased from $-0.51$ to $-0.52$) when religious beliefs were partialed out, but the correlation between paranormal beliefs and religious beliefs changed from $-0.10$ to $0.17$ when service attendance was partialed out. In the psychology sample, the correlation between paranormal beliefs and service attendance increased from $-0.22$ to $-0.28$ when religious beliefs were partialed out, and the correlation between paranormal belief and religious beliefs increased from $0.10$ to $0.20$ when service attendance was partialed out.

Bible knowledge was strongly negatively related to paranormal beliefs in the total sample ($r = -0.39$, $p = .001$), but this fell to nonsignificance ($r = -0.13$, $p = .230$) in the psychology sample, perhaps because there were relatively few psychology students who scored high on Bible knowledge (only three scored above the mean of the religious meeting participants). Paranormal beliefs and science knowledge were only marginally negatively related in the total sample.

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5 The paranormal index was unrelated to all of the individual religious beliefs as well, except one. Greater belief in the inspiration of the Bible was associated with lower paranormal beliefs, $r = -0.265$, $p = .004$.

6 This negative relationship between paranormal beliefs and Bible knowledge remained significant when science knowledge, evidence-based thinking, or both were partialed out ($r = -0.37$, $p = .001$, $r = -0.20$, $p = .035$, and $r = -0.19$, $p = .044$, respectively).
Table 2: Correlations

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Paranormal Beliefs</td>
<td>–</td>
<td>–.10/ .10</td>
<td>–.18/- .17</td>
<td>–.39***/.13</td>
<td>–.55***/- .42***</td>
<td>–.51***/- .22*</td>
</tr>
<tr>
<td>2. Religious Beliefs</td>
<td>–</td>
<td>–</td>
<td>–.06/-.13</td>
<td>.31***/.14</td>
<td>.06/-.24*</td>
<td>.44***/.38***</td>
</tr>
<tr>
<td>4. Bible Knowledge</td>
<td>–</td>
<td>–</td>
<td>–.51***/.22*</td>
<td></td>
<td>.68***/.27*</td>
<td></td>
</tr>
<tr>
<td>5. Evidence-Based</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>.55***/.04</td>
<td></td>
</tr>
<tr>
<td>6. Monthly Service</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
<td>–</td>
</tr>
</tbody>
</table>

**Note:** Correlations for the entire sample appear before the / and correlations for the psychology students alone appear after the /. *Significant at p < .05. **Significant at p < .01. ***Significant at p < .001.

(r = -.18, p = .055) and not significantly related in the psychology sample (r = -.17, p = .116). In contrast, however, evidence-based thinking was strongly negatively related to paranormal beliefs in both the total sample (r = -.55, p = .001) and the psychology sample (r = -.42, p = .001). These substantial correlations would seem to be noteworthy.

Bible knowledge was related more strongly to service attendance (r = .68, p = .001 in the total sample, r = .27, p = .011 in the psychology sample) than to religious beliefs (r = .31, p = .001 in the total sample, r = .14, p = .193 in the psychology sample). Perhaps Bible knowledge and service attendance both speak to commitment more than do religious beliefs. It was interesting to note that Bible knowledge and science knowledge were positively related (r = .35, p = .001 in the total sample, r = .37, p = .001 in the psychology sample). Finally, as one might expect, service attendance and religious beliefs were strongly related (r = .44, p = .001 in the total sample, r = .38, p = .001 in the psychology sample).

**Discussion**

The current work found that committed Christians were very low in paranormal beliefs. In addition, religious beliefs and paranormal beliefs were unrelated, but service attendance was negatively related to paranormal beliefs and some evidence suggested that Bible knowledge was negatively related to paranormal beliefs. The current research also found evidence-based thinking to be at odds with paranormal
beliefs. These findings would seem to have several potentially important implications, as described below.7

Religion and Paranormal Beliefs

What is the relationship between religion and belief in the paranormal? The answer to this question seems to depend on several factors, including the sample, the measure of religiosity, and the specific paranormal belief. Each of these will be discussed briefly. In the current work the two psychology college student groups did not differ for any of the 12 paranormal beliefs or for the paranormal index. This might make it appear that religion and belief in the paranormal are substantially unrelated. However, the inclusion of the participants from the religious meeting revealed quite a different picture. These conservative Christians were far lower in paranormal beliefs than either of the psychology student groups.

The participants from the religious meeting may be distinctive in at least three ways. First, as noted earlier, the church of Christ is a conservative religious group (e.g., Bainbridge & Stark, 1980), and the current participants were probably more conservative than most. For example, one of the distinguishing characteristics of the church of Christ is their determination to hold to the religious practices described in the New Testament (e.g., baptize as the New Testament church did, partake of communion as the New Testament church did). Many congregations of the church of Christ adopted multiple loaves and communion cups approximately 100 years ago, but the people at the religious meeting primarily came from congregations that continue to follow the New Testament pattern of one loaf and one cup in the communion. Second, the church of Christ is not only distinctive in being religiously conservative. A rational faith and being correct in doctrine is also emphasized. One might speculate that other religious individuals who are very devout, but who emphasize emotion, might endorse paranormal beliefs to a greater degree. Third,

7 Although potential applications are not explored in this discussion, it may be worthy of note that, just as a decline in the influence of religion in the last 50 years may be partially responsible for the skyrocketing depression rate (e.g., Seligman, 1989), a decline in the influence of religion might also lead to an increase in paranormal beliefs in society.
the participants from the religious meeting also seemed to be very dedicated with regard to religion. Not all Christians would travel some distance to attend a religious meeting, and yet many of these individuals did, testifying to their religious commitment. Other data, such as higher Bible knowledge, charitable giving, and service attendance are consistent with this characterization.

Thus, the current data lend support to the view that extremely religious individuals (at least if those extremely religious individuals are conservative Christians) tend to be lower in paranormal beliefs. Given this, should it be concluded that religious individuals are lower than nonreligious individuals in paranormal beliefs? Not necessarily. Recent research suggests that extremely nonreligious individuals (Atheists in particular) also tend to be low in paranormal beliefs (Bainbridge, 2004; see also Thalbourne & Delin, 1999). In sum, although the current research is consistent with the view that religion and paranormal beliefs are negatively related, they are also consistent with the view that the relationship between religion and the paranormal is curvilinear; both extremely religious and extremely nonreligious individuals may be low in paranormal beliefs.

The current findings also lend additional support to the view that the relationship between religion and paranormal beliefs depends on how one defines religion. Religious beliefs were not related to paranormal beliefs in the current sample, but, consistent with other recent research (e.g., Orenstein, 2002), service attendance was negatively related to paranormal beliefs and there was some evidence that religious beliefs and service attendance have opposing effects. Bible knowledge was also negatively related to paranormal beliefs, although this was only significant when the religious meeting participants were included in the analysis. Bible knowledge, like service attendance, may involve greater commitment than religious belief, and it has the advantage of being immune to social desirability concerns.

Some previous research suggests that very religious individuals are higher in some paranormal beliefs (e.g., precognition; Williams, et. al., 1989), but this was not found in the current research. One possible explanation is that the current precognition item specifically mentioned psychic abilities, whereas the items developed by Tobacyk and Milford (1983) and used by Williams and colleagues (1989) were broad enough to include biblical prophecy. No doubt the religious meeting participants would have strongly endorsed the view, for example, that the Old Testament prophets wrote accurately about
Jesus Christ, but that would probably be better characterized as a religious belief than a paranormal belief. Although the current religious meeting participants certainly believed in the supernatural (e.g., God, the devil, the resurrection of Jesus Christ, creation), they drew a marked distinction between God’s miracles and paranormal claims. Research suggests that experts make more fine distinctions (e.g., Johnson, & Mervis, 1997; Tanaka, Curran, & Sheinberg, 2005). To the degree that extremely religious individuals know more about their religion (the religious meeting participants did, as evidenced by their greater Bible knowledge), they may be in some sense experts, and so may strongly believe in biblical miracles while simultaneously strongly disbelieving the paranormal claims of palm-readers and psychics. Thus, although the belief in the supernatural that is part and parcel of many religious views may have some commonalities with a belief in the paranormal (e.g., Wuthnow, 1978), greater knowledge of religion (at least of Christianity) may immunize people against paranormal beliefs.

**Evidence-Based Thinking and Paranormal Beliefs**

As described earlier, researchers have learned that a number of variables that one might think would be at odds with paranormal beliefs (e.g., science knowledge, logical reasoning, Need for Cognition) do not seem to be. However, some research suggests that critical thinking (Gray & Mill, 1990) and scientific reasoning (Hoekstra et al., 2003) are negatively related to paranormal beliefs. The current findings for evidence-based thinking are consistent with this. Thus, it appears that critical thinking skills, rather than simply knowledge (e.g., science knowledge) or an enjoyment of thinking (e.g., Need for Cognition), tend to reduce belief in astrology, palm-reading, and UFOs. No doubt this is consistent with what many academicians have observed anecdotally. Although educational attainment can be negatively related to paranormal beliefs (e.g., Sparks & Miller, 2001), probably only certain aspects, perhaps those that pertain to reasoning rather than knowledge, are involved (e.g., Mill et al., 1994).\(^8\)

\(^8\) Another possibility is that a college education at a secular university tends to foster a secular worldview, which may be philosophically incompatible with paranormal beliefs. In the current sample, number of college credits was negatively related to paranormal beliefs \((r = -.28, p = .002)\), even controlling for age \((r = -.26, p = .005)\), but GPA was unrelated \((r = -.13, p = .17)\).
Future Directions

Although the current work produced some interesting findings, it also raises some interesting questions. For example, why did the Christians from the religious meeting display a low degree of paranormal belief? There would seem to be at least three possibilities. One possibility is that religious beliefs and paranormal beliefs may serve similar functions (e.g., Emmons & Sobal, 1981). If so, a person high in one might feel no need for the other, producing a negative relationship. A second possibility is that a biblical worldview may be incompatible with many paranormal beliefs. Astrology, crystals, ESP, and the like seem to spark of New Age beliefs. Perhaps then, conservative Christians reject the paranormal for the same reason they reject New Age theology, that it is incompatible with the Bible. Consistent with this, Bible knowledge remained negatively correlated with paranormal beliefs even after evidence-based thinking and science knowledge were partialled out. Yet a third possibility is that a biblical worldview may be incompatible with paranormal beliefs for the same reason that evidence-based thinking appears to be incompatible. Although some skeptics might find it surprising, the Bible encourages several types of critical thinking. For example, Christians are encouraged to Test everything. Hold on to the good. (I Thessalonians 5:21, NIV). Consistent with this, the Christians from the religious meeting were not only lower in paranormal beliefs, but also higher in evidence-based thinking. These issues would seem to be worthy of additional research.

It may also be interesting to consider why Atheists also seem to be low in paranormal beliefs. Perhaps their disbelief serves functions (e.g., purpose in life) such that they feel no need for either religion or the paranormal. Anecdotally, it certainly appears that some Atheists dedicate much of their lives to promoting their perspective. Or, perhaps their worldview is incompatible with any belief that does not conform to naturalism. If so, they might disbelieve anything supernatural, but believe ideas that possess the trappings of science, even if those ideas are not based on evidence (such as some aspects of the theory of evolution; e.g., Behe, 1996; Dembski, 2002). Finally, they might have critical thinking skills that allow them to spot charlatans. These possibilities might also be worthy of the attention of researchers.

In conclusion, the current work provides additional evidence that very religious conservative Christians tend to disbelieve the paranormal. Evidence-based thinking also seems to be at odds with paranormal
beliefs. These findings would seem to be of value to scientists of religion, to social scientists in general, and to others who are concerned about the influence of paranormal beliefs in society.

Appendix A

1. When people make a surprising claim, it is always a good idea to have a neutral, objective person check the facts. (–.16/–.21)
2. Evidence is more important to consider than the opinions of people, even if those people are authorities. (–.08/.01)
3. If an expert suggests that something is true, we should believe it, even if it seems surprising. [Reversed] (.23*/.13)
4. If you want to decide which of two views is better, it is a good idea to consider the evidence for both sides. (–.25**/–.23*)
5. When two views fit the evidence equally well, one should choose the simpler one. (–.11/–.09)
6. On issues where there is disagreement, a good way to get at the truth is to take a poll to determine which position the majority of experts believe. [Reversed] (.28**/.14)
7. The best ideas are those that cannot be tested, because then no one can prove you wrong. [Reversed] (.30**/.21*)
8. People should be able to explain to others why they hold the views that they do. (–.30**/–.20)
9. People should believe whatever they want to believe, even if it goes against the evidence. [Reversed] (.36***/.11)
10. Ideas are not very useful unless there is a way to determine whether or not the ideas are true. (–.25**/–.12)

Note: For the benefit of interested researchers, for each statement the correlation with the paranormal beliefs index is given in parentheses (Total sample/Psychology students). * Significant at p < .05. ** Significant at p < .01. *** Significant at p < .001.
References


RELIGIOUSNESS AND RELIGIOUS COPING AS DETERMINANTS OF STRESS-RELATED GROWTH

Crystal L. Park

ABSTRACT

As research focusing on stress-related growth proliferates, links between religion and growth are increasingly reported. However, little research has focused on the role that religious coping plays in subsequent growth from major stressful life events. Findings from three longitudinal studies that examined aspects of religiousness as determinants of stress-related growth, as well as the potential mediation by religious coping, are presented. Results suggest that the influences of religiousness on growth vary by sample and by type of stressor. Further, religious coping was found to mediate influences of religious orientations on growth for students and for older adults dealing with a variety of problems, but was unrelated to growth following bereavement in a second sample of students. Together, these studies provide support for the notion that religiousness influences growth in complex ways, only some of which are mediated through religious coping. Future research considerations are discussed.

Stress-related growth, the positive life changes that occur in the context of stressful events and their aftermath, has been attracting increasing research attention in recent years (see Calhoun & Tedeschi, in press). Research has established that many people—in most studies, even the majority—report positive life changes after highly stressful experiences, including illnesses such as cancer (e.g., Tomich & Helgeson, 2004) and HIV (Bower et al., 1998), sexual assault (Frazier, Tashiro, Berman, Steger, & Long, 2004), mass killing, plane crash, tornado (McMillen, Smith, & Fisher, 1997), childhood sexual abuse (McMillen, Zuravin, & Rideout, 1995), physical assault (Updegraff & Marshall, 2005), and war experiences such as combat (Elder & Clipp, 1989), the Dresden Bombing (Maercker & Herrle, 2003), and peacekeeping missions in military zones (Britt, Adler, & Bartone, 2001).

These positive changes have been variously described as “post-traumatic growth”, “perceived benefits”, “adversarial growth”, and
“stress-related growth”, and refer to positive changes that are typically noted in life domains such as social relationships (e.g., becoming closer to family or friends), personal resources (e.g., developing patience or persistence), life philosophies (e.g., rethinking one’s priorities), spirituality (e.g., feeling closer to God), coping skills (e.g., learning better ways to handle problems or manage emotions), and health behaviors or lifestyles (e.g., lessening stress and taking better care of one’s self) (Tedeschi & Calhoun, 2004; Park, 2004).

Various factors have been shown to be associated with stress-related growth (SRG), including personality characteristics (e.g., optimism, extraversion), external resources (e.g., social support), use of particular coping strategies (e.g., positive reappraisal, active coping), and religion. In fact, one of the most consistent findings from the accumulating literature is that religion is strongly related to growth (see Ano & Vasconcelles, 2005, and Shaw, Joseph & Linley, 2005, for reviews). Still, relatively little empirical attention has been given to understanding the reasons for this strong connection.

A great deal of research has demonstrated that religion is a powerful resource for individuals coping with stressful events by providing them with coping tools and a framework of meaning (see Pargament et al., 2005, for a review), and it has been proposed that religion may function as a resource that helps people to grow from stressful events. However, few researchers have focused explicitly on the role that religious coping plays in subsequent growth from major stressful life events. Several studies by Pargament and his colleagues have demonstrated that religious coping can lead to spiritual growth and, more generally, stress-related growth, with a variety of life problems, including illness (Pargament, Koenig, & Perez, 2000), having an autistic child (Tarakeshwar & Pargament, 2001), and assorted other stressors (Pargament, Smith, Koenig, & Perez, 1998). Religious coping has also been found to be related to stress-related growth following bereavement (Park & Cohen, 1993).

These existing studies raise questions regarding the specific nature of the links between religiousness and growth. For example, given that religion is a multidimensional construct (e.g., Idler et al., 2003),

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1 The term “stress-related growth” is used in this paper as most participants did not experience a stressor that met DSM criteria for “trauma” (Park, 2004).
which aspects of religiousness are most closely associated with growth? Studies have documented that intrinsic religiousness (e.g., Park & Cohen, 1993), religious participation (e.g., Tedeschi & Calhoun, 1996), and importance of religion (e.g., Koenig et al., 1998) were related to growth. However, few studies have included multiple dimensions of religion to compare their relative relations with growth.

A variety of religious dimensions were included in the present series of studies: intrinsic and extrinsic religiousness, organized religious participation, and, in the study of bereavement, beliefs in the afterlife and hope. These dimensions are commonly assessed in research and represent different beliefs, motivations, and behaviors regarding one’s faith (see Donahue & Nielsen, 2005, and Levenson et al., 2005). Intrinsic religiousness refers to religiousness wherein the individual’s faith is his or her “master motive” in life, around which life is organized. Extrinsic religiousness has been characterized as faith that is more utilitarian and functional; extrinsic faith is in the service of other goals. Although contemporary conceptualizations of intrinsic and extrinsic religiousness consider these motives to be orthogonal and independent, they are often positively correlated (Spilka, Hood, Hunsberger, & Gorsuch, 2003). Participation in organized religious activities is another important dimension of religiousness, representing both a behavioral enactment of one’s commitment and an opportunity to receive social support through one’s religiousness. Do all of these dimensions lead to growth? And if so, which are the strongest influences on growth?

Other questions raised by the current body of research include whether these links are direct or are mediated through the coping attempts that individuals make as they attempt to deal with their stressful experiences, and whether these effects, which have mostly been documented cross-sectionally, hold up across time.

The aim of this paper is to address these questions regarding the religion-growth link by examining relationships between various dimensions of religion and stress-related growth. Results from three longitudinal studies are presented in which aspects of religiousness and religious coping are examined as determinants of subsequent stress-related growth, including the potential role of religious coping as a mediator of the religiousness-growth link.
Study 1 College Student Sample

The first study utilized a convenience sample of undergraduates to examine the roles of religiousness and religious coping in their growth over time from their current most stressful event.

Method

Participants were 182 university undergraduates attending a Midwestern university in the United States, obtained from the Psychology Department’s participant pool. Age ranged from 16 to 38 years of age (mean age = 19.2 years). Sixty-five percent of participants were women, and race was predominantly Caucasian (92%).

Measures

Religious-Related Beliefs. Religiousness was assessed with the A-UI/E Scale-Revised (Gorsuch & McPherson 1989), which consists of five items assessing intrinsic religiousness and five items assessing extrinsic religiousness. Participants rated each item on a scale from 0 (strongly disagree) to 4 (strongly agree). Internal consistency reliabilities in the present sample were .83 and .79, respectively.

Participants were also asked how often they are involved in their church or place of worship using a single item from 1 (not at all involved) to 7 (highly involved).

Religious Coping was assessed with the four-item religious coping subscale of the COPE (Carver, Scheier, & Weintraub, 1989), which asked participants the extent to which they used religious coping with the current stressor (e.g., “I try to find comfort in my religious or spiritual beliefs”), rated from 1 (not at all) to 4 (very much). Internal consistency reliability in the present sample was .84.

Stress-Related Growth from the Current most stressful Event was assessed with the Stress-Related Growth Scale (SRGS; Park, Cohen, & Murch, 1996). The SRGS consists of 50 items assessing positive changes that the respondent has experienced because of or following the particular stressor identified by the respondent. Each item is scored as a 0 (didn’t experience this at all), 1 (experienced this somewhat), or 2 (experienced this a great deal). Internal consistency reliability in the present sample was .91.

Procedure. At baseline, participants completed measures of intrinsic and extrinsic religiousness and were asked to report a problem that
was currently the most stressful in their lives. One month later, participants were asked about their coping with the previously identified stressor and their stress-related growth from it.

Results

Descriptions of Current Stressors
Participants’ most difficult current life stressors fell into the following categories: academic issues (40%), interpersonal problems (14%), family concerns (12%), future-related worries (11%), romantic problems (9%), personal illness/injury (7%), financial strain (2%), legal issues (1%), and other problems (4%). On a scale of 1 (not at all stressful) to 7 (extremely stressful), participants’ mean stressfulness rating was 5.0 (SD = 1.4).

Relations Among Religious Dimensions, Religious Coping, and Growth
To assess relations among study variables, a series of bivariate correlations was conducted. Results indicated that intrinsic religiousness was related to subsequently assessed growth, but neither extrinsic religiousness nor religious participation was significantly related to growth. Intrinsic and extrinsic religiousness were fairly highly correlated with each other as well as with religious coping. Further, religious coping was significantly correlated with stress-related growth (see Table 1).

Table 1  Study 1 Bivariate Correlations Among Study Variables (College Student Sample)

<table>
<thead>
<tr>
<th></th>
<th>Intrinsic Religiousness</th>
<th>Extrinsic Religiousness</th>
<th>Church Involvement</th>
<th>Religious Coping</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extrinsic Religiousness</td>
<td>.66***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Church Involvement</td>
<td>.65***</td>
<td>.56***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Religious Coping</td>
<td>.76***</td>
<td>.44***</td>
<td>.55***</td>
<td></td>
</tr>
<tr>
<td>Stress-Related Growth</td>
<td>.21**</td>
<td>.13</td>
<td>.11</td>
<td>.24**</td>
</tr>
</tbody>
</table>

Note: *p < .05, **p < .01, ***p < .001
Mediational Analyses of Religiousness to Growth Through Religious Coping

These analyses followed the procedure described by Baron and Kenny (1986). In order to warrant a mediational analysis, the following conditions were required: (1) the religiousness dimension was significantly correlated with stress-related growth, (2) religious coping was significantly correlated with stress-related growth, and (3) the religiousness dimension was significantly correlated with religious coping (Baron & Kenny, 1986).

Because all three of the requisite conditions were met only for intrinsic religiousness, a hierarchical regression was conducted in which intrinsic religiousness was entered as the first step and religious coping was entered as the second step. This regression model was significant (F(2, 146) = 4.16, p < .01), and indicated that the effects of intrinsic religiousness on stress-related growth were mediated by religious coping (see Figure 1).

![Figure 1](image)

Figure 1 Study 1 Analysis of Religious Coping as a Mediator of Intrinsic Religiousness and Stress-Related Growth in College Students

Discussion

These results suggest that the kind of religiousness that provides the master motive for an individual’s life may be the kind of religiousness that most directly leads to stress-related growth, consistent with previous work (e.g., Park & Cohen, 1993). However, religious participation in this sample was not related to growth, suggesting that the growth experienced by these students was more of an interior
than a communal experience. The effect of intrinsic religiousness operated through participants’ use of religious coping. These findings are consistent with theories that suggest that religiousness is related to growth following difficult life experiences through its provision of adaptive coping strategies (Pargament, 1997).

**Study 2 Senior Sample**

As a replication of Study 1, the second study used the same methodology to examine a community-based sample of senior citizens who reported on their coping with their current most stressful event.

**Method**

**Participants** were a community sample of 83 people (61 women, 22 men, mean age = 77.9) recruited from retirement communities and senior centers in a Midwestern city in the United States.

**Measures and procedure** were the same as those described in Study 1.

**Results**

**Current Stressors**

Participants reported a variety of stressful experiences, including their own health problems (52%), family issues (14%), family illness (12%), financial concerns (6%), social strains (4%), death of a loved one (3%), living alone or relocating (3%), and other experiences (6%). On a scale of 1 (not at all stressful) to 7 (extremely stressful), participants’ mean stressfulness rating was 4.3 (SD = 1.7).

**Relations of religiousness and growth from a stressor**

Bivariate correlations were conducted to examine relationships among the variables. Both intrinsic and extrinsic religiousness were significantly related to growth following their stressful experience, but religious participation was not. All three dimensions of religiousness were related to each other and to subsequent religious coping (see Table 2).

**Mediational Analyses**

These analyses followed the procedure recommended by Baron and Kenny (1986), described above. Because all three of the requisite
conditions were met for both intrinsic and extrinsic religiousness, a hierarchical regression was conducted for each, in which the first step included intrinsic or extrinsic religiousness and the second step included religious coping. These regressions indicated that the effects of intrinsic religiousness on stress were mediated by religious coping \((F(2, 76) = 4.81, p < .01)\) (see Figure 2a), and also that the effects of extrinsic religiousness on Time 2 stress-related growth were mediated by religious coping \((F(2, 76 = 4.86, p < .01)\) (see Figure 2b).

### Comparative Analysis of Effects of Intrinsic and Extrinsic Religiousness on Growth

Because both participants’ intrinsic and extrinsic religious orientations were related to subsequent growth from their current stressful experience, a regression analysis was conducted to determine the relative influence of both orientations on stress-related growth. Results indicated that, when both orientations were considered simultaneously, extrinsic religiousness, but not intrinsic religiousness, was related to growth \((F_2, 76) = 7.62, p < .001; \text{Beta for extrinsic} = .43, p < .001, \text{Beta for intrinsic} = .01, \text{ns})\).

### Discussion

The findings from Study 2 are similar in some ways to those from Study 1, but also differ markedly in some important ways. As in Study 1, intrinsic religiousness was shown to predict later growth, an effect again mediated by religious coping. This supports current theorizing that this more internalized kind of religiousness is related
Figure 2 Analysis of Religious Coping as a Mediator of Intrinsic and Extrinsic Religiousness and Stress-Related Growth in Elderly Community Residents
to the ability to perceive benefits from highly stressful experiences, an effect that operates through religious attempts to deal with the stressor. However, in Study 2, extrinsic religiousness was also related to growth, unlike the results of Study 1. Additionally, although intrinsic and extrinsic religiousness were closely related, when their effects were considered simultaneously, effectively controlling for their overlapping variance, extrinsic religiousness emerged as the dominant determinant of stress-related growth. The difference in the influence of extrinsic religiousness in this older adult sample is intriguing, and may be due to a variety of differences from the sample in Study 1, including cohort differences or differences in the problems with which they were dealing (primarily health problems compared to academic stressors). Study 3 examined a sample dealing with a common stressor, bereavement.

Study 3 Bereavement

Study 3 attempted to extend the results found in Studies 1 and 2 by focusing on participants coping with the same stressful event, by extending the time frame, and by including two other dimensions relevant to religiousness, particularly in the context of bereavement, beliefs in an afterlife and hope, to examine their prediction of stress-related growth relative to intrinsic and extrinsic religiousness as well as to examine whether their effects on growth are mediated through religious coping. Although research examining the roles of religiousness and religious coping to bereavement is not extensive, some studies have found religion to be related to better adjustment, and have posited that these effects arise by helping participants to cope with and make meaning of their loss (e.g., Park, 2005; Krause et al., 2002).

Method

Participants were 98 college students from a public Midwestern university who participated in this study for partial fulfillment of research requirements, 25 men and 73 women, with a mean age of 19. Over 90 percent of the participants were White. Participants reported their denominational affiliation as Catholic, (40%) Protestant (47%), None (9%), or some other affiliation (e.g., Jewish, Buddhist, Muslim) (4%).
Measures. Measures for intrinsic and extrinsic religiousness, religious coping, and stress-related growth were the same as those used in Studies 1 and 2. In addition, measures of afterlife beliefs and hope were added. Given that religious participation was uniformly unrelated to growth in Studies 1 and 2, to reduce participant burden, it was not included in Study 3.

Beliefs in afterlife were assessed using the Belief in Afterlife Scale (Osarchuk & Tatz, 1973), which consists of ten items assessing strength of belief in the afterlife (e.g., “There must be an afterlife of some sort”). Participants rated their beliefs on a scale from 0 (total disagreement) to 10 (total agreement). Internal consistency in the present sample was .89.

Hope, the extent to which a person feels a sense of agency (goal-directed determination) and pathways (ways to meet one’s goals), was assessed with the Dispositional Hope Scale (Snyder et al., 1991), a 12–item measure (four of which are filler items) on which respondents rate themselves on a scale of 0 (strongly disagree) to 3 (strongly agree), from which a score for degree of hope is derived. In this study, an overall hope score was used (internal consistency reliability = .81).

Procedure
Participants were recruited from the participant pool with an advertisement for a study on “Significant loss.” Volunteers completed a questionnaire that asked them to describe their most significant loss in the past two years. Only those who reported having lost a loved one in the past two years, and who considered the loved one to be close (determined by a rating of four or higher on a seven-point Likert scale assessing “closeness”) were included in the present analyses. At Time 1, participants reported that the death of their loved one had occurred, on average, 11.6 months ago (SD = 8 months, range .5 to 24 months).

Results

Relations of religiousness and growth from a stressor
A series of bivariate correlations were conducted to examine relationships among the variables. Intrinsic and extrinsic religiousness were again strongly related to each other and to religious coping.
Beliefs in afterlife were related to religious coping as well as to intrinsic and extrinsic religiousness but not to stress-related growth. In fact, only extrinsic religiousness was significantly related to growth following the loss (see Table 3).

### Table 3 Study 3 Bivariate Correlational Results among Study Variables (Bereavement Sample)

<table>
<thead>
<tr>
<th></th>
<th>Intrinsic Religiousness</th>
<th>Extrinsic Religiousness</th>
<th>Afterlife Beliefs</th>
<th>Hope</th>
<th>Religious Coping</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extrinsic Religiousness</td>
<td>.76***</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>Afterlife Beliefs</td>
<td>.61***</td>
<td>.47***</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hope</td>
<td>.12</td>
<td>.02</td>
<td>.09</td>
<td></td>
<td>-.01</td>
</tr>
<tr>
<td>Religious Coping</td>
<td>.80***</td>
<td>.71***</td>
<td>.57***</td>
<td>-.01</td>
<td></td>
</tr>
<tr>
<td>Stress-Related Growth</td>
<td>.05</td>
<td>.20*</td>
<td>.07</td>
<td>.12</td>
<td>.11</td>
</tr>
</tbody>
</table>

*Note: *p < .05, **p < .01, ***p < .001

**Mediational Analyses**

These analyses followed the procedure recommended by Baron and Kenny (1986), described above. Because all three of the requisite conditions were not met for any of the religious variables, no mediational analysis was conducted.

**Discussion**

In examining a group of individuals dealing with a common stressor, bereavement, the influence of religiousness on growth was somewhat different than that found in Study 1, conducted with a similar sample of college students, except for the stressors with which they were dealing. Intrinsic religiousness in this case was unrelated to growth, but extrinsic religiousness was related to growth, an effect unrelated to the use of religious coping, even though those high in extrinsic religiousness (as well as intrinsic religiousness) relied heavily on religious coping to deal with their loss. This finding suggests that in addition to its relation to religious coping, extrinsic religiousness provided the bereaved students with some way of understanding their changed life situation that involved positive after-effects of the loss.
This effect may be due to the social support received from involvement with one’s faith community, which was not assessed in Study 3. Future research is needed to understand how extrinsic orientations toward religion can lead to growth.

The findings that both beliefs in the afterlife and hope were unrelated to growth following the loss are curious. Few studies have examined beliefs in the afterlife with regards to adjusting to bereavement, but it is generally assumed that these beliefs should provide some comfort and perhaps allow individuals to be more positive in their post-bereavement functioning (e.g., Krause et al., 2002). Similarly, hope has been shown to be related to stress-related growth following stressful life events (see Aldwin, in press). The fact that neither of these religion-related resources was related to growth warrants future research attention.

**General Discussion**

Together, these results provide convergent evidence that the growth reported following life stressors is predicted by religiousness. It appears that intrinsic and extrinsic religiousness may both lead to growth following stressful experiences, depending on the individual and the circumstances of the stressful experience with which they are dealing. Further, religious coping sometimes, but not always, mediates these influences.

Although providing useful insights into the roles of religious variables on growth, limitations of these studies should be noted. First, as noted, all three studies were conducted in the Midwestern USA, precluding generalizability to other samples elsewhere. Further, religious coping was assessed with a fairly blunt instrument, the religious coping subscale of the COPE. In fact, religious coping is a multidimensional construct, and, more recently, measures that assess distinct aspects of religious coping, such as the RCOPE (Pargament et al., 2000) have been developed. Such distinctions might provide more insight into the nature of particular types of religious coping that are more closely linked to aspects of religiousness as well as stress-related growth.

The strong relations between intrinsic and extrinsic religiousness deserve mention. Although some studies have found intrinsic and extrinsic religiousness to be moderately positively correlated, other studies have found no relationships or even negative relationships
(see Donahue, 1985, for a review). While the strong positive relations in the present series of studies may be a function of the measure used, similar positive relations in other studies using other measures have been noted (e.g., Park et al., 1990). Perhaps there has been a cultural shift in the relationship of these variables over time, or perhaps the location of all three of these studies (Midwestern USA) could account for this positive relationship. It may also be that the orthogonal nature of extrinsic and intrinsic religiousness emerges in samples that are more homogenous in their levels of religiousness, and that in more heterogeneous samples, such as those in the present studies, intrinsic and extrinsic both reflect levels of general religiousness, masking the distinctions between them.2

Clearly, much more research is necessary to understand the ways that people make meaning of their stressful experiences in light of their beliefs, connections, and motives, and how this meaning making leads to identifying positive aspects of the stressor and allows individuals to ultimately grow through them (Park & Folkman, 1997; Park, 2005). This research should examine broader samples of individuals dealing with a wide variety of life experiences, and, ideally, follow them over time to understand the processes through which they attempt to cope using a variety of religious as well as non-religious methods of coping. Additionally, it may be important to examine gender differences in these processes; previous research has found that women tend to score higher on some measures of religiousness (e.g., Tarakeshwar, Hansen, Kochman, & Sikkema, 2005). It is possible that the relations among religiousness and growth vary by gender as well. Future studies will need to use samples large enough to allow for the examination of men and women.

In conducting these future studies, researchers should keep in mind that the development of religious beliefs, connections, and motives is likely to be bidirectional, in that people who use their religiousness in their attempts to cope with and make meaning of their stressful event are also likely to change their beliefs, connections, and motives in the process (Shaw et al., 2005). While such research must be very thoughtfully and painstakingly conducted, the opportunities to shed light on one of the most important aspects of human existence, the ability to survive and thrive in adverse circumstances, is great.

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2 Thanks to an anonymous reviewer for this explanation.


KONSTRUKTIONEN DER RELIGIOSITÄT
VON RAINER MARIA RILKE

Eine kritische Analyse aus entwicklungspsychologischer Perspektive

Hermann-Josef Wagener

ABSTRACT

Former studies on the religiosity of the poet Rainer Maria Rilke show highly divergent results: The religious educationalist Anton Bucher draws on the basis of the analysis of structural genetics the conclusion that Rilke had been a very mature religious personality. The literary scholar Eudo C. Mason who works with psycho-dynamical criteria classifies him as a pure narcist and atheist. These two differing interpretations on Rilke’s religiosity are brought to a new synthesis in my integrative model. This kind of religiosity is widely spread in our western society.

The following study compares the two different approaches and tries to bridge between the “mature religious personality” and the “narcist and atheist”. It is built from the perspective of Developmental Psychology. The structural genetic approach and the theory of Religious Judgement of Oser & Gmünder (1992) are modified psychodynamically (Wagener, 2002). In this way new aspects for an integrative model can be found. It results in a construct in which the different approaches are integrated plausibly and coherently.

The integrative model shows that Rilke’s religious development stabilises itself on stage 4 of Oser’s & Gmünder’s model, because in this religious structure of cognition the intra-subjectivity is accentuated. It requires a healthy narcism, an atheistic examination and a maturing symbolic internalization. When the development is proceeding from stage 4 to 5 by Oser & Gmünder the topic of inter-subjectivity appears. As soon as the personal relationship with its closeness and relatedness between “me and you” is noticeable, Rilke neutralizes subject and object, “me and you” under the guidance of the “angels”. This leads to an emotionally emptiness of the “me and you” relationship and leads to the meaningless space. This reflects the relationship conflict Rilke never managed to resolve due to his psychological burden. This conflict distorted and blocked his religious development.


1 Biographische Skizze

Die familiären Verhältnisse, in die Rainer Maria Rilke (1875–1926) hineingeboren wurde, waren für ihn als Einzelkind sehr ungünstig. Seine masochistisch-frömmlerische Mutter erzog ihn bis zu seinem fünften Lebensjahr ausdrücklich wie ein Mädchen. Rilke spielte mit Puppen; er wurde von seiner Mutter René genannt und als Nichtsnutz bezeichnet. Ihre Bigotterie zeigte sich, in dem sie ihn anhielt, das

Rilkes Schwierigkeiten, eine Ich-Du-Beziehung einzugehen, kommen vor allem in der Gestalt des Engels zum Ausdruck, der trotz seiner zum Greifen offen hand für Rilke nicht in die Welt einzutreten vermag:

Engel, und würb ich dich auch! Du kommst nicht.
Denn mein
Anruf ist immer voll Hinweg; wider so starke
Strömungen kannst du nicht schreiten. Wie ein gestreckter
Arm ist mein Rufen. Und seine zum Greifen
oben offene Hand bleibt vor dir
offen, wie Abwehr und Warnung,
Dies hat für Rilke etwas Erschreckendes, denn in der Bewegung der Engel zu den Menschen würden diese „vergehen von seinem stärkeren Dasein“:


2 Religiöse Urteilsstufen und Narzissmus

verbunden; Homonomie bedeutet, dass Transzendenz innerhalb der Menschlichkeit und menschlichen Freiheit erscheint, und unter Apriorität wird „unbedingte Annahme“ verstanden. Die narzisstische Psychodynamik, die von Bucher durch den Hinweis auf solipsistische Aspekte in Rilkes Texten thematisiert wird und die bei Masons Rilke-Interpretation eine zentrale Rolle spielt, erweist sich also als entwicklungspsychologisch datierbar. Auf dieser methodischen Basis steht die vorliegende Analyse.


3.1 Analyse


Die Stufe 2 entdeckt Bucher in Äußerungen Rilkes während seiner Militärschulzeit, in der er unter den Demütigungen der Kameraden
Hermann-Josef Wagener


Ohne die Stufe 2 ausdrücklich zu erwähnen, zitiert Bucher ein Geburtstagsgedicht Rilkes an seine Mutter aus dem Jahre 1889, in dem das Kernmerkmal des Stufenniveaus 2 deutlich hervortritt. Es ist die Erwartung an Gott, dass er diesen oder jenen Wunsch erfülle:

Ich fleh: 'O Herr, lass lang noch glücklich sein
und schenke Glück und Frieden
dem vielgeliebten, teuren Mütterlein.'
Der Himmel wird den Wunsch erhören,
den fromm ein kleines Herze spricht,
des Kindes Wünsche streng verwehren
kann der barnherz'ge Vater nicht ![. . .] (SW III, p. 479).


Indem Rilke die Priester als Betrüger, den Papst als den „ersten Sünder“ titulierte und die Kirchgänger als „Schafe“ beschimpfte (SW III, pp. 489ff.), erteilte er eine kräftige Absage an die christliche
Eschatologie, insbesondere an die Vorstellungen vom „himmlichen Lohn“ und von der „höllischen Strafe“, wie sie für die Stufe 2 typisch sind:

„Du wirst dann untergehen“, ruft ihr, „nicht auferstehen, wenn die Posaune gellt!“ „Habt Dank,—ich bleibe liegen, Ich lasse mir’s genügen an dieser einen Welt.— Ich glaub an eine Lehre, von der man sagt, sie wäre auf Erden selbst sich Lohn. Die Lehre, die ich übe, die Lehre heißt die Liebe, sie ist mir Religion‘ (SW III, p. 491).

In dieser eindeutigen Stufe 3—Artikulation wird nach Bucher die Immanenz absolut gesetzt und das autonome Ich zur letztgültigen Instanz erhoben; dabei grenzt es sich vom externalen Ultimaten und auch von der religiösen Gemeinschaft ab, es begreift sich nicht mehr als untertan und entwickelt eine rebellische Haltung gegenüber einer Religiosität, die die Kindheit bestimmt hat und transformiert werden muss, damit die Person zu einer religiösen Autonomie gelangen kann (Bucher, 2004, p. 223).


Jeder kommt in Trauerkleidern vom Sterbebette eines Kindheitsgottes; aber bis er zuversichtlich und festlich geht, geschieht in ihm die Auferstehung Gottes (Fr.Tgb., p. 52).

Die Erfahrungen, die Rilke mit seiner Freundin Lou Andreas-Salomé, mit seinen Russlandreisen und seinem Aufenthalt in Florenz verband, haben sich nach Bucher auf seine religiöse Entwicklung in entscheidender Weise ausgewirkt:

Einmal, unten am südlichen Meer, kam ein junger Philosoph zu mir, dessen auf sehr sicheren Wegen erreichbarer Gott inmitten stiller, spielerischer Systeme saß, und sprach mir von diesem erkannten Gotte mit


   Erst später naht er der Natur  
   und fühlt die Winde und die Fernen,  
   hört dich, geflüstert von der Flur,  
   sieht dich, gesungen von den Sternen,  
   und kann dich nirgends mehr verlernen,  
   und alles ist dein Mantel nur (SW I, p. 322).


Denn das ist Schuld, wenn irgendeines Schuld ist:
Die Freiheit eines Lieben nicht vermehren
um alle Freiheit, die man in sich aufbringt.
Wir haben, wo wir lieben, ja nur dies:
einander lassen; denn daß wir uns halten,
das fällt uns leicht und ist nicht erst zu lernen (SW I, p. 654).


Dennoch meint Bucher dann doch, in Rilkes „Duineser Elegien“ das Stufenniveau 5 nachweisen zu können, also eine religiöse Entwicklung, die auch unter dem Aspekt der kommunikativen Praxis, der Einheit von unendlicher Gottes- und Nächstenliebe steht; dem Aspekt, wo Liebe als Sinnbestimmung endlicher Freiheit, als universaler Solidarität erlebt wird und das Ultimate den Menschen selbst zum Ziel hat. Auf diesem religiösen Niveau erfährt sich die Person von dem, was sie als das Ultimate anerkennt, trotz Kontingenz und Tod, als ganz und gar anerkannt. Die Erde mit all ihren positiven und negativen Schattierungen1 wird in Unsichtbares und Geistiges verwandelt (Bucher, 2004, pp. 239–241; SW I, pp. 719f, Neunte Elegie). Sofern dieses gelingt, bricht Jubel hervor, der bei Rilke in Opheus seine Stimme fand:

Rühmen, das ists! Ein zum Rühmen Bestellter,
ging er hervor wie das Erz aus des Steins
Schweigen. Sein Herz, o vergängliche Kelter
eines den Menschen unendlichen Weins.
Nie versagt ihm die Stimme am Staube,
Wenn ihn das göttliche Beispiel ergreift.

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1. The term “stress-related growth” is used in this paper as most participants did not experience a stressor that met DSM criteria for “trauma” (Park, 2004).
Alles wird Weinberg, alles wird Traube,  
in seinem fühlenden Süden gereift.

Nicht in den Grüften der Könige Moder  
straft ihm die Rühmung lügen, oder  
daß von den Göttern ein Schatten fällt.

Er ist einer der bleibenden Boten,  
der noch weit in die Türen der Toten  
Schalen mit rühmlichen Früchten hält (SW I, p. 735).

Das „Heilige“ ist von nun an, so Bucher, bei Rilke nicht mehr  
begrenzt wie auf seinen früheren Stufen, sondern umfasst jetzt das  
gesamte „Profane“, ja selbst den Bereich des Todes, der als ein Teil  
der bruchlosen Einheit des Daseins begriffen wird (Bucher, 2004,  
p. 242). Diese Struktur sieht Bucher im folgenden Text verankert:

Engel (sagt man) wüßten oft nicht, ob sie unter  
Lebenden gehn oder Toten. Die ewige Strömung  
reißt durch beide Bereiche alle Alter  
immer mit sich und übertönt sie in beiden (SW I, p. 688).

Bucher folgert: Das Dasein ist magisch, geheimnisvoll und nicht mehr  
funktional erklärbar. Die Spaltung zwischen Sein und Dasein ist über-  
wunden. Die große Einheit von Leben und Tod wurde erfahren  

3.2 Diskussion

3.2.1 Die Verwechslung der Stufen 4 und 5
Diskussionswürdig ist, wie prägnant der strukturgenetische  
Verifikationsversuch Buchers die aus den Texten beobachtbare  
Religiosität von Rilke widerspiegelt. Bucher verwechselt die Struktur  
der Stufe 5 mit derjenigen der Stufe 4. Fälschlicherweise interpretiert  
er die Rilkesche Religiosität hinsichtlich des Freiheitsgeschehens  
intersubjektiv, in Wirklichkeit liegt aber eine intrasubjektive Erfahrung  
und Artikulation gemäß der idealtypischen Stufe 4 vor. Im Zusammen-  
hang der Stufe 5 habe, so Bucher, Rilke ein authentisches Erlebnis  
gehabt, in dem er—bildlich gesprochen—, angelehnt an den Stamm  
eines strauchartigen Baumes, plötzlich die Einheit seines Körpers mit  
der Natur und den Wegfall der Zeit erfuhr:

Seiner Gewohnheit nach mit einem Buch auf und abgehend, war er  
darauf gekommen, sich in die etwa schulterhohe Gabelung eines  
strauchartigen Baumes zu lehnen, und sofort erfühlte er sich in dieser  
Haltung so angenehm unterstützt und so reichlich eingeruht, daß er


3.2.2 Die Verwechslung vom empirischen und idealtypischen Relativ
Bucher begeht hinsichtlich der Stufe 5 genau den Fehler, den Kritiker des struktursogenetischen Ansatzes aufzeigen: Er verwechselt seine Beschreibung der Rilkeschen Religiosität, die Mängel aufweist, mit

Zwar tritt das Moment der personalen Beziehung zu anderen bei Rilke deutlich hervor. Aber er vertieft dabei seine Intersubjektivität nicht, sondern überhöht diese, indem er das Ultimate gerade nicht in der personalen Freiheit der Geliebten verortet und dadurch Selbstentfaltung, Personalität und Freiheit von „Ich“ und „Du“ nicht qualitativ wachsen lässt. Seine Liebe endet nicht nur, sondern Rilke ist „von ihr abgekommen“:

[. . .] Und ihr, hab ich nicht recht,  
die ihr mich liebet für den kleinen Anfang  
Liebe zu euch, von dem ich immer abkam,  
weil mir der Raum in eurem Angesicht,  
da ich ihn liebte, überging in Weltraum,  
in dem ihr nicht mehr wart [. . .] (SW I, pp. 698, 47–52, Die vierte Elegie).


Es widerstrebt mir [. . .], die Liebe zu Gott für ein besonders abgegrenztes Handeln des menschlichen Herzens zu halten; [. . .]—dass dieses Herz bei jedem seiner Fortschritte seinen Gegenstand durchbricht oder einfach verliert und dann unendlich hinausliebt (SW VI, p. 1042).

Damit scheitert Rilke, strukturgenetisch gesehen, im Übergang zur Stufe 5. Die Relationen zwischen den Komponenten im Rilkeschen
Denken weichen deutlich von der idealtypischen Konzeption der Stufe 5 ab. Die Konzeption des Ultimaten besteht bei Rilke keineswegs in dem Ereignis von Freiheit und Liebe, sondern tritt als Ereignis des „offenen, menschenleeren Raumes“ auf:

weil mir der Raum in eurem Angesicht,  

Diese Divergenz übersieht Bucher. Das religiöse Denken Rilkes unterscheidet sich in bestimmten Urteilsstrukturen deutlich von der idealtypischen Stufe 5: Das beobachtete empirische Relativ entspricht also nicht dem idealtypischen Relativ. Rilke denkt anders als bei Bucher mit Hilfe der idealtypischen Stufe 5 empirisch nachgewiesen werden sollte.

3.2.3 **Kritik an der Methode des strukturgenetischen Ansatzes**


Bucher hat Recht, wenn er sagt, Kritiker der Rilkeschen Religiosität wie Mason müssten ihr Vorverständniss ändern und Religiosität weniger aus der Perspektive konfessioneller als vielmehr anthropologischer

4 Eudo C. Masons Urteil über Rilkes Religiosität

4.1 Masons Argumentation


Dies habe die Leugnung und Ablehnung der Existenz Gottes zur Folge: „Ich bin mein eigener Gesetzgeber und König, über mir ist niemand, nicht einmal Gott“ (Mason, 1949, p. 72; SW IV, p. 532). Vor diesem Gott könne Rilke sich tief verneigen, denn der Gott des Stundenbuches sei ein produktiv gegebener und selbst erschaffener Gott (Mason, 1949, pp. 72ff.):

ICH bin derselbe noch, der kniete
vor dir in mönchischem Gewand:
der tiefe, dienende Levite,
den du erfüllt, der dich erfand (SW I, p. 307).

Diese Art von Produktivität setze daher die Nicht-Existenz irgendeines Gottes voraus. In Wirklichkeit, so Mason, handle es sich nur darum,
dass Rilke das Gottsymbol erschöpft und durch andere Symbole ersetzt (Mason, 1949, p. 73). Rilke sehe „Dinge“ (wie Ehrfurcht vor dem Menschen, vor dem Geist, vor dem Schicksal, vor der Kunst, vor sich selbst) als heilig an, die früher keiner religiösen Ehrfurcht unterlagen (Mason, 1949, p. 74):

ICH finde dich in allen diesen Dingen,  
denen ich gut und wie ein Bruder bin;  
as Samen sonnst du dich in den geringen  
und in den großen giebst du groß dich hin (SW I, p. 266).


WAS wirst du tun, Gott, wenn ich sterbe?  
Ich bin dein Krug (wenn ich zerscherbe?)  
Ich bin dein Trank (wenn ich verderbe?)  
Bin dein Gewand und dein Gewerbe,  
mit mir verlierst du deinen Sinn (SW I, p. 275).

Im Kern gehe es bei Rilke um einen verzweifelten und vergeblichen Versuch, für das Dasein einen unendlichen Sinn zu finden, obwohl er auch um die Möglichkeit gewusst habe, dass das Dasein sinnlos sein könnte (Mason, 1949, p. 68). Mason charakterisiert Rilkes Religiosität auf folgende Weise: „Man ist nicht Atheist, denn man glaubt, dass das Leben göttlich ist; man ist aber ebenso wenig Theist, denn dasjenige, an dessen Göttlichkeit man glaubt, ist eben das Leben, das Leben um seiner selbst willen, das auf sich gestellte, autonome
Leben, das nichts über oder außer sich braucht—oder erträgt [. . .]“ (Mason, 1949, p. 69).

4.2 Diskussion


Obwohl er annimmt, Rilke argumentiere atheistisch, beginnt Mason aber dann doch Rilkes Religiosität in einer Weise zu interpretieren, die der Stufe 4 nahe kommt. Diese Interpretation ist jedoch strukturgenetisch nur möglich, wenn die angeblichen atheistischen Wendungen in Wirklichkeit atheisierende sind. Denn nur als atheisierende bleibt die Stufe 3b entwicklungsfähig. Indem Mason bei Rilke die Trennung zwischen Ultimatem und Mensch wahrnimmt, die nur durch die Bestrebungen und Leistungen des Menschen überbrückt wird, beschreibt er den Übergang zur Stufe 4 hin. Zwar deutet er die Art und Weise dieser Bestrebungen und Leistungen nur an, aber entscheidend ist, dass er sie auf die Ebenen des Gefühls und der Symbolik verlagert. Darin wird deutlich, dass die Bestrebungen emotional und die Leistungen symbolisch geschehen, somit die Trennung zwischen Gott und Mensch indirekt überwunden wird.


Rilke vollzieht den Übergang von Stufe 3b zu Stufe 4, sobald er in seiner „immanenten Religiosität“ durch Grenzsituationen hinterfragt wird wie z.B. in „Mädchen-Klage“:

Und ich dachte noch, das Leben
hörte niemals auf zu geben,
daß man sich in sich besinnt.
Bin ich in mir nicht im Größten?
Will mich Meines nicht mehr trösten
und verstehen wie als Kind?

Plötzlich bin ich wie verstoßen,
und zu einem Übergroßen
wird mir diese Einsamkeit,
en, auf meiner Brüste Hügeln
stehend, mein Gefühl nach Flügeln

oder in „Liebes-Lied“:

WIE soll ich meine Seele halten, daß
sie nicht an deine rührt? [. . .]
Doch alles, was uns anrührt, dich und mich,
nimmt uns zusammen wie ein Bogenstrich,
der aus zwei Saiten *eine* Stimme zieht.
Auf welches Instrument sind wir gespannt?
Und welcher Geiger hat uns in der Hand?
O süßes Lied (SW I, p. 482, März 1907).

Erst hier verliert sich der Anschein des reinen Subjektivismus, den Mason so oft kritisiert. Dabei tritt die Dimension des „Sinns“ hervor, in der der Zweifel an der Objektivierbarkeit des Glaubens schwindet und das Individuum merkt, dass sein Glaube seinen Sinn erst vom Sinn des vorgegebenen Glaubens erhält. Mit Hilfe dieses intersubjektiven Glaubens *begabt* sich der Mensch selbst mit einem persönlichen Glauben. Im Nach- und Besinnen macht er den Glauben für sich verständlich. Gleichzeitig merkt er, dass seine sinnvolle
Religiosität eine Sinnentsprechung im objektiven Glauben erfordert, in dem, was Fritz Oser einen „Plan“ nennt.


**DIE DARSTELLUNG MARIAE IM TEMPEL**
Um zu begreifen, wie sie damals war,
muß du dich erst an eine Stelle rufen,
wo Säulen in dir wirken; wo du Stufen
nachfühlen kannst; wo Bogen voll Gefahr
den Abgrund eines Raumes überbrücken,
der in dir blieb, weil er aus solchen Stücken
getürmt war, daß du sie nicht mehr aus dir
auseben kannst [. . .] (SW I, p. 667f.).

Oder:

**VERKÜNDIGUNG ÜBER DEN HIRTEN**
SEHT auf, ihr Männer. Männer dort am Feuer,
die ihr den grenzenlosen Himmel kennt,
Sterndeuter, hierher! Seht, ich bin ein neuer
steigender Stern. Mein ganzes Wesen brennt
und strahlt so stark und ist so ungeheuer
voll Licht, daß mir das tiefe Firmament
nicht mehr genügt. Laßt meinen Glanz hinein
in euer Dasein [. . .]
[. . .]Gott fühlt sich ein
in einer Jungfrau Schooß. Ich bin der Schein
von ihrer Innigkeit, der euch geleitet“ (SW I, pp. 671ff.).

Oder:

**GEBURT CHRISTI**
[. . .] Sieh, der Gott, der über Völkern grollte,
macht sich mild und kommt in dir zur Welt. [. . .]
Biblische Geschehnisse erhalten für Rilke einen neuen existentiellen Sinn, nach dem er sein persönliches Leben ausrichtet.

5 Vorschlag eines Integrativmodells

Auf der Basis der unterschiedlichen Argumentationsweisen soll nun versucht werden, ein Modell zu entwickeln, das die verschiedenen Gesichtspunkte miteinander verbindet. Das Ziel besteht darin, eine modifizierte Wirklichkeitserfassung zu konstruieren, die den verschiedenen wissenschaftlichen Theorien, insbesondere der Strukturgeneese und der Psychodynamik, im gleichen Maße gerecht wird und sie miteinander korrigierend und ergänzend in ein plausibles Zusammenspiel bringt. Die gegensätzlichen Beschreibungen, Rilke sei ein narzisstischer Atheist oder ein sehr reifer religiöser Mensch, können zu einer differenzierenden, entwicklungsmaßigen Betrachtungsweise zusammenwachsen. Diese Betrachtung folgt aber nicht einer bestimmten Vorgabe an Entwicklungsschritten, argumentiert also nicht entwicklungsgemäß. Vielmehr soll anhand einer konkret aufgefundene individuellen Entwicklung gezeigt werden, dass sich die Religiosität Rilkes in eine bestimmte Richtung entwickelt, sich also entwicklungsmaßig vollzieht.

5.1 Die Religiosität Rilkes


Rilkes Religiosität drückt sich aufgrund eigener Erfahrungen aus, weniger in vorgefertigten Verhaltensschemen. Religiöse Aussage und die menschliche Selbstaussage stehen nicht mehr beziehungslos
nebeneinander, sondern durchdringen sich. Rilke erhält seine religiöse Identität dadurch, dass er seinen eigenen Erfahrungen eine religiöse Sprache verleiht. Das potentiell Symbolische wird erst durch die erlebte Wirklichkeit Symbol. Dabei bleibt weniger das Gottesbild wichtig, sondern vielmehr der Bezug zum (nicht eingreifenden) Ultimaten. In dieser symbolischen Weise ist Gott fern, aber zugleich gut sichtbar nah. Nicht mehr Jesus Christus ist der Vermittler zwischen Gott und Mensch, sondern der Mensch selbst mit seinen guten und schlechten Seiten ist „Träger Gottes“.

Rilkes Denken zeichnet sich in seinen Schriften überwiegend durch ein apriorisches Ultimates aus, das die positiven und negativen Dimensionen des Lebens in einer a-personalen, alles umfassenden Sinnmacht vereinigt. Dieses Ultimate symbolisiert Rilke häufig durch die sogenannten „Engel“. Für ihn gibt es weder ein Diesseits noch ein Jenseits, sondern die große Einheit, in der die „Engel“ zu Hause sind. Der rufende Mensch bewegt sich auf die Engel zu, aber die Gegenbewegungen fehlen; hier tritt die Rilkesche Beziehungsproblematik auf. Eine Ich-Du-Beziehung vollzieht sich dialektisch. Bei Rilke jedoch zeigt sich etwas Erschreckendes, das die Gemeinschaft zwischen Ich und Du, ein Wir unmöglich macht: Es gibt keine Bewegung des Engels zu den Menschen hin, weil der Mensch vor dem Wesen zurückschreckt, das nur in Bezug zur Welt steht, aber nicht „in“ die Welt eintreten kann:

[... ] Und seine zum Greifen
oben offene Hand bleibt vor dir
offen, wie Abwehr und Warnung,
Unfaßlicher, weitauf (SW I, p. 713).

Die Abwehr besteht in der Angst, zerstört zu werden, und zutiefst in der Angst, geliebt zu werden, denn das würde bedeuten, vor dem „stärkeren Dasein“ der Engel zu vergehen. Mit den „Engeln“ tritt die „offene Welt“ hervor, jene Dimension, in der alle sind, und wo die Grenzen zwischen Hüben und Drüben, Leben und Tod überwunden und gänzlich aufgehoben sind; und zwar nicht verwischt oder getrennt; vielmehr sind sie in diesem gänzlichen Aufgehobensein als lebendige Sinnspannung enthalten. Dieses „Offene“ gleicht einem Zustand des Daseins und ist gleichbedeutend mit dessen „Ganz- und Heilsein“. Daraus ergibt sich eine differenziertere Sicht auf Rilkess Religiosität: Der „Engel“ und die „offene Welt“ werden für Rilke zu den wichtigsten Repräsentanten der göttlichen Wirklichkeit, die
als „a-personale Sinnmacht“ oder als „ich- und du-lose“, als „subjekt- oder gegenstandslose Liebe“ die weltliche Wirklichkeit umfängt und aufhebt, sie aber nicht personal liebt.


5.2 Rilkes Persönlichkeit in ihrem neurotischen Aspekt

Die (religiösen) Auffälligkeiten in Rilkes Leben beschreibt Decker (2004) folgendermaßen:

Es ist die Furcht vor dem Mangel und der inneren Leere, die Rilke als Narzisst vorantreibt und die ihn gleichzeitig still stehen lässt (p. 236). Die Liebe ist für ihn eine „Einübung in das Zurücklassen des Lebens, die er zur eigentlichen Lebens-Aufgabe stilisiert“ (p. 190). Rilke flüchtet vor dem, wonach er sich gleichzeitig am meisten sehnt: der Liebe zu einem anderen Menschen (p. 193), wird dadurch eigentlich bindingsunfähig (p. 207), projiziert sich selbst in sein Gegenüber hinein und hört nur, was er selbst in den anderen hineinruft. Dieser hermetische Monolog stellt eine pathetisch maskierte Leere dar, die im Gottesbild des Engels Gestalt gewinnt (p. 233). Der Engel ist Rilke so fern, wie ihm lebenslang die Mutter bleibt. Er ist das Symbol „einer an sich selbst verzweifelnden Fernenliebe“, die an die narzisstische Ur-Szene, der lieblosen Mutter-Kind-Beziehung erinnert (pp. 185–187). Der Engel ist nur da, wo man ihm keine Gestalt gibt. Er ist eine Chiffre für diese Leerstelle, für den abwesenden Gott (p. 188).

Das reale Getrenntsein wird zum konstitutiven Moment der monologischen, dass heißt narzisstischen Liebe, die auch von Panik, Depression und Masochismus geprägt ist (pp. 158, 234–235). Aufgrund seiner Erfahrung in der Kinderzeit konnte er keine reife Geschlechtsidentität ausbilden, sein Verhalten Frauen gegenüber blieb somit kindhaft (pp. 176–177).

Diese Symptombeschreibung trägt sicherlich eine neurotische Qualität in sich. Sie zeigt sich erst zur Stufe 5 hin manifest, liegt aber bere-
its latent in den vorausgehenden religiösen Persönlichkeitsniveaus vor. In Stufe 2 aktiviert der depressive Aspekt bestimmte Stufenkonstruktionselemente wie Hingabe, Abhängigkeit oder Angst überwertig, während in den Stufen 3a, 3b und 4 die narzisstische Dimension eine höhere Intensivierung der Elemente von Unabhängigkeit, Freiheit und Vertrauen erhält. Erst im Übergang von Stufe 4 zu Stufe 5, wo der Beziehungsaspekt, also die Intersubjektivität, mehr akzentuiert wird als die Intrasubjektivität, tritt bei Rilke die Hemmung in der religiösen Entwicklung manifest auf. Seine Tendenz, über die Stufe 4 hinauszukommen, verzerrt sich aufgrund seiner konstanten Intra-Subjektivität, also seines Mangels an Beziehungsfähigkeit. Hier werden Elemente wie Immanenz, gesunde Abhängigkeit, Vertrauen unterwertig, aber Freiheit, Transzendenz und Angst überwertig besetzt. Dadurch entstehen instabile strukturelle Stufenformationen, weshalb es in Rilkes Entwicklung immer wieder zu Regressionen kommt.

Obwohl die beiden ersten Teile des „Stundenbuches“ in der Artikulationsstufe 4 nach Oser & Gmünder verfasst sind, regrediert Rilke im dritten Teil auf die Stufen 2 und 3a.

5.2.1 Aufweis der Regressionen auf Stufen 2 und 3a im dritten Teil des „Stundenbuches“

Hier fühlt sich Rilke in seiner personalen Beziehung zum Letztgültigen ungewollt und heteronom von Gott in eine „dunkle Stunde“ hineingesetzt. Er erlebt sich von Gott extrem (überwertig) abhängig, so dass er nicht mehr das Sagen hat: „so bin ich nichtmehr Herr in meinem Munde“. Rilke pflegt dem Letztgültigen gegenüber die Erwartung, verändert zu werden. Er wünscht sich, Gott möge ihn zum „Wächter, Horchenden am Stein . . .“ machen. Dabei begreift Rilke Gott als ein Gegenüber, das ihn und die Menschen direkt beeinflussen und lenken kann. Gleichzeitig steht er in der offenen Erwartung, ob das Ultimate ihm seine Wünsche gewährt oder nicht, also Gott in sein Leben so eingreift, wie er sich es wünscht. Zwischen Rilke und seinem Letztgültigen steht also ein Verhältnis der „bipolaren Reziprozität“. Die dabei auftretende „Do ut des—Perspektive“ oder die „Zuschreibung der Kontingenzbewältigung ausschließlich durch Gott“ zeigen sich beispielsweise in den nachfolgenden Texten:

O Herr, gieb jedem seinen eigenen Tod.
Das Sterben, das aus jenem Leben geht,
 darin er Liebe hatte, Sinn und Not. (SW I, p. 347; 15. April 1903)
Mach Einen herrlich, Herr, mach Einen groß,
bau seinem Leben einen schönen Schoß,
und seine Scham errichte wie ein Tor . . .
Und eine Nacht gieb, dass der Mensch empfinde . . .
Mach, dass er seine Kindheit wieder weiß . . .
Und also heiß ihn seiner Stunde warten . . . (SW I, pp. 349–350; 16. April 1903)

Das letzte Zeichen laß an uns geschehen . . .
Du aber gründe ihn in deine Gnade,
in deinem alten Glanze pflanze ihn ein;
und mich laß Tänzer dieser Bundeslade,
laß mich den Mund der neuen Messiade,
den Tönenden, den Täufer sein. (SW I, p. 351; 16. April 1903)

Und gieb, dass beide Stimmen mich begleiten,
streust du mich wieder aus in Stadt und Angst.
Mit ihnen will ich sein im Zorn der Zeiten,
und dir aus meinem Klang ein Bett bereiten
an jeder Stelle, wo du es verlangst. (SW I, P. 352; 17. April 1903)

Hier, am 17. April 1903, beginnt Rilke, Wut und Zorn gegenüber
gott zu spüren, die ihn wieder zur Progression auf die nächsten
Stufen 3a und 3b hin antreiben:

Die großen Städte sind nicht wahr; sie täuschen
den Tag, die Nacht, die Tiere und das Kind;
 ihr Schweigen lügt, sie lügen mit Geräuschen
und mit den Dingen, welche willig sind.

Nichts von dem weiten wirklichen Geschehen,
das sich um dich, du Werdender, bewegt,
geschieht in ihnen. Deiner Winde Wehen
fällt in die Gassen, die es anders drehen,
 ihr Rauschen wird im Hin- und Wiedergehen
verwirrt, gereizt und aufgeregt.
Sie kommen auch zu Beeten und Alleen—: (SW I, p. 352; 17. April
1903)

Danach schaut Rilke in die weltliche Wirklichkeit, ohne Gott dabei
anzureden („Denn Gärten sind,—von Königen gebaut (SW I, p. 352)“;
„Dann sah ich auch Paläste, welche lebe (SW I, p. 353)“). Doch dann
verfällt er wieder zurück und endet im Kognitionsmuster der Stufe 2:

Das waren Reiche, die das Leben zwangen
Unendlich weit zu sein und schwer und warm.
Aber der Reichen Tage sind vergangen,
und keiner wird sie dir zurückverlangen,
nur mach die Armen endlich wieder arm. (SW I, p. 355; 17. April 1903, aus: „Dann sah ich auch Paläste, welche leben“)

Kurz nach dem Satz „nur mach die Armen endlich wieder arm“ öffnet sich der kognitive Entwicklungsweg auf die Stufe 3a hin, in der Rilke seine „Lust am Leiden“ religiös narzisstisch verarbeitet:

Denn sie sind reiner als die reinen Steine
und wie das blinde Tier, das erst beginnt,
und voller Einfalt und unendlich Deine
und wollen nichts und brauchen nur da Eine:
so arm sein dürfen, wie sie wirklich sind. (SW I, p. 356; 17. April 1903, aus: „Sie sind es nicht. Sie sind nur die Nicht-Reichen“)

und:

„DENN Armut ist ein großer Glanz aus Innen...“ (SW I, p. 356; 17. April 1903)

Die Verinnerlichung, angetrieben durch den narzisstischen Entwicklungsprozess, beginnt. Stufe 3a tritt mit seiner „narzisstischen Selbstbestätigung“ und „narzisstischen Objektwahl“ auf: Gott wird als der arme, hilflose erlebt und bestätigt dadurch das eigene subjektive Erleben der seelischen Armut und Einsamkeit. Dabei erlangt Rilke seine „Lust am Leiden“ latent religiös vom Letztgültigen bestätigt. Doch zuvor beginnt Rilke, teils aus Enttäuschung, teils aus Wut und Zorn, Gott zu hinterfragen. Der Übergang vom Kognitions muster 2 zur Stufe 3a hin tritt in Erscheinung:

DU bist der Arme, du der Mittellose,
du bist der Stein, der keine Stätte hat,
du bist der fortgeworfene Leprose,
der mit der Klappe umgeht vor der Stadt.

Denn dein ist nichts, so wenig wie des Windes,
und deine Blöße kaum bedeckt der Ruhm;
das Alltagskleidchen eines Waisenkindes
ist herrlicher und wie ein Eigentum.

... Und was sind Vögel gegen dich, die frieren,
was ist ein Hund, der tagelang nicht fraß,
und was ist gegen dich das Sichverlieren,
das stille lange Traurigsein von Tieren,
die man als Einengangene vergaß?
Und alle Armen in den Nachtasylen,
was sind sie gegen dich und deine Not?
Sie sind nur kleine Steine, keine Mühlen,
aber sie mahlen doch ein wenig Brot.

Du aber bist der tiefste Mittelose,
der Bettler mit verborgenem Gesicht,
du bist der Armut große Rose,
die ewige Metamorphose
des Goldes in das Sonnenlicht.

Du bist der leise Heimatlose,
der nichtmehr einging in die Welt:
zu groß und schwer zu jeglichem Bedarfe.
Du heulst im Sturm. Du bist eine Harfe,
an welcher jeder Spielende zerschellt.“ (SW I, pp. 356–358; 18. April 1903)

Das Letztgültige wird seines Ruhmes entkleidet, klein gemacht, hinterfragt nach seiner Kompetenz. Es ist arm, heimatlos, schwach, mittellos, ein Bettler mit verborgenem Gesicht, aber auch affirmativ antinomisch (Stufe 3a) entgegengesetzt: Die ewige Metamorphose des Goldes in das Sonnenlicht, der Armut große Rose. Offensichtlich sind es Enttäuschungen und Frustrationen mit dem Ultimaten, wie es von Rilke auf Stufe 2 konzeptualisiert wurde, die ihn auf sich selbst zurückwerfen. Rilke fängt an, Gott zu bezweifeln (Stufe 3a). Obwohl die armen Menschen kleiner, schwächer, aber nicht ärmer sind als Gott, bringen sie doch im geringen Tun Frucht: „Und alle Armen in den Nachtasylen, was sind sie gegen dich und deine Not? Sie sind nur kleine Steine, keine Mühlen, aber sie mahlen doch ein wenig Brot.“ Rilkes Selbstbewusstsein gegenüber dem „armen, aber doch mächtigen Gott“ wächst und beginnt stärker zu werden, zerbröckelt und zerbricht aber noch an der subjektiv empfundenen Macht Gottes: „Du bist wie eine Harfe, an welcher jeder Spielende zerschellt“. Fortan erfährt sich Rilke dem Ultimaten gegenüber immer selbstbewusster und freier.

Die beiden Merkmale der kognitiven Trennung der positiven und negativen Selbst-Objekt-Repräsentanten und die affirmative Antinomie zeigen sich deutlich:

DU, der du weißt, und dessen weites Wissen
aus Armut ist und Armutsüberfluß:
Mach, daß die Armen nichtmehr fortgeschmissen
und eingetreten werden in Verdruss.
Die andern Menschen sind wie ausgerissen;
sie aber stehn wie eine Blumen-Art
aus Wurzeln auf und duften wie Melissen.
und ihre Blatter sind gezackt und zart. (SW I, p. 358; 18. April 1903)

Die Trennung wird sichtbar: Im ersten Satz „DU...Verdruß“ part-
tiziert Rilkes negatives Erleben an der Vorstellung des Ultimaten. Danach schaut Rilke nur noch auf die anderen Menschen (zweiter Satz), die er rein positiv erlebt, aber nicht mehr in die Beziehung zum Gottesbild setzt, da diese potentielle Partizipation mit dem dann positiv geprägten Ultimaten sein Erleben narzisstisch nicht bestätigt und anerkennt. Diese aufgefundene Struktur gleicht der der Stufe 3a. Rilke spiegelt sich, d.h. sein seelisches Empfinden in den Bildern des Ultimaten; dabei lehnt er alle positiven Aspekte seiner Person und die des Ultimaten ab; Rilke kennt nur noch sein negatives Erleben, das der Negativität des Ultimaten gleicht. Aber dieses „Negative“ wird narzisstisch erhöht; in der „Armut“ liegt das Wertvolle und zeigt sich—psychoanalytisch gesprochen—das „Größenselbst“, wie es in der Stufe 3a erscheint. Im gleichen Atemzug identifiziert sich Rilke mit dem Heiligen Franziskus und erfährt eine Progression in seiner verzerrten religiösen Entwicklung:

O wo ist der, der aus Besitz und Zeit zu seiner großen Armut so erstarkte,
daß er die Kleider abtat auf dem Markte
und bar einherging vor des Bischofs Kleid.
Der Innigste und Liebendste von allen,
der kam und lebte wie ein junges Jahr;
der braune Bruder deiner Nachtigallen,
in dem ein Wundern und ein Wohlgefallen
und ein Entzücken an der Erde war....
Er kam aus Licht zu immer tieferm Lichte,
und seine Zelle stand in Heiterkeit.
Das Lächeln wuchs auf seinem Angesichte
und hatte seine Kindheit und Geschichte
und wurde reif wie eine Mädchenzeit....
Und ihn empfing das Große und Geringe....
Und als er starb, so leicht wie ohne Namen,
da war er ausgeteilt: sein Samen rann
in Bächen, in den Bäumen sang sein Samen
und sah ihn ruhig aus den Blumen an.
Er lag und sang. Und als die Schwestern kamen,
da weinten sie um ihren lieben Mann.“ (SW I, pp. 364–366; 19./
20. April 1903)
Rilke empfindet sich im Symbol „Franziskus“ in seiner Armut vor Gott lebendig, kräftig und liebend anerkannt (Stufe 3a).

5.2.2 *Aufweis der Regression auf Stufe 3b in „Neue Gedichte“*

Neben den (regressiven) Stufen 2 und 3a im dritten Teil des „Stundenbuches“ treten Regressionen auf Stufe 3b in einigen Texten des „Neuen Gedichtes“ auf.

Die Stufe 3b trennt die beiden Bereiche der Welt und des Ultimativen voneinander. Die Person, die in Stufe 3b sich religiös artikuliert, lehnt das Letztgültige ab; wobei aber die Ablehnung (Negation) durch das Abgelehnte verständlich wird. So bleibt in der subjektiven religiösen Beziehung zu Gott eine sogenannte Disjunktion erhalten. Die Partizipation mit Gott (Projektion) ist emotional und personal so gut wie vollständig zurückgenommen. Der Mensch erfährt sich hier als ganz und gar selbstverantwortlich oder selbstbestimmend und beansprucht eine solipsistische Autonomie. Der phasenspezifische Narzissmus kommt voll zum Tragen.

Exemplarisch sei der Text „Der Ölbaum-Garten“ (geschrieben: Mai/Juni 1906) angeführt. Dabei taucht zuerst Stufe 2 auf, die dann bewusst, entsprechend der Stufe 3b, abgelehnt wird:

Nach allem dies. Und dieses war der Schluß.
Jetzt soll ich gehen, während ich erblinde,
und warum willst Du, daß ich sagen muß
Du seist, wenn ich Dich selber nicht mehr finde.
Ich finde Dich nicht mehr. Nicht in mir, nein.
Nicht in den andern. Nicht in diesem Stein.
Ich finde Dich nicht mehr. Ich bin allein.
Ich bin allein mit aller Menschen Gram,
den ich durch Dich zu lindern unternahm,
der Du nicht bist. O namenlose Scham . . . (SW I, p. 493)

Doch bei dieser Ablehnung des Ultimativen kann Rilke nicht stehen bleiben. Er fährt sofort in Richtung Stufe 4 weiter:

Später erzählte man: ein Engel kam—.
Warum ein Engel? Ach es kam die Nacht
und blätterte gleichgültig in den Bäumen.
Die Jünger rührten sich in ihren Träumen.
Warum ein Engel? Ach es kam die Nacht. . . .“ (SW I, p. 493)

Doch fällt er strukturell wieder zurück in Stufe 3b:
Denn Engel kommen nicht zu solchen Betern,
und Nächte werden nicht um solche groß.
Die Sich-Verlierenden läßt er alles los,
und sie sind preisgegeben von den Vätern
und ausgeschlossen aus der Mütter Schoß. (SW I, p. 494)

Die Disjunktion des Ultimaten lässt Rilke in seiner tiefen Einsamkeit zurück, was schließlich seinen phasenspezifischen Narzissmus (Selbstbezogenheit) zu relativieren beginnt und deutlich in „Mädchenklage“ (see above section 4.2, SW I, p. 482) zum Ausdruck kommt. Er kann sich selbst nicht mehr trösten und verstehen. Seine Einsamkeit wird unerträglich; seine Selbstbesinnung gelangt an weltliche Grenzen, so dass Rilke sich nach einer Alternative oder einem Ende sehnt und sich beispielsweise in dem Text „Die Rosenschale“ in die Denkrichtung der Stufe 4 nach Oser & Gmünder hin öffnet:

... wenn Sich-enthalten heißt: die Welt da draußen ...
in eine Hand voll Innres zu verwandeln.
Nun liegt es sorglos in den offnen Rosen.“ (SW I, p. 554; Neujahr 1907)


5.3 Rilkes eigenständige Religiosität


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<th>Stundenbuch</th>
<th>Neue Gedichte</th>
<th>Elegien und Sonette</th>
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<td>Teile 1 und 2 Teil 3&lt;br&gt;bis 1902&lt;br&gt;1903</td>
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Stufe 4

Regression: Stufen 2 und 3a<br>Progression: Stufen 3b–4;

Das vorliegende strukturgenetische und psychodynamisch orientierte Modell integriert nicht nur die atheisierenden Gedankengänge innerhalb der religiösen Entwicklung, sondern beschreibt auch die Dynamik im Vollzug religiöser Genese, die sich in Regression, Blockaden oder Progression ausdrücken kann. Solange die atheisierende Vorstellung keiner Stagnation oder Fixierung zum „Atheismus“ unterliegt, ist sie im genetischen Kontext gesehen phasenbedingt und zählt strukturgenetisch gesehen zu einer notwendigen Phase innerhalb der religiösen Entwicklung. Das bedeutet aber auch, dass keine Religionsform (Stufe, Muster) für sich genommen qualiﬁziert werden kann, da die Erkenntnis ausbleibt, ob sie progressiv, regressiv oder idealtypisch ist. Erst die Gesamtsicht auf den entwicklungsmaßigen Kontext lässt eine solche Qualiﬁzierung zu.

Es zeigt sich, dass jedes religiöse Urteil in seinen Elementenkominationen wie Freiheit versus Abhängigkeit, Profanes versus Heiliges etc. abweichen kann von der idealtypischen Stufenkombination. Weiterhin lässt sich durch das vorliegende Modell eine konkrete religiöse Biographie entwicklungspsychologisch besser verstehen; und im Rückschluss dient es zur Überprüfung der strukturgenetischen und psychodynamischen Theorien. Jede individuelle religiöse Entwicklung kann sich von der allgemeinen Entwicklungstheorie unterscheiden. Deshalb müssen polygenetische und ontogenetische
Konstruktionen der Religiosität von Rainer Maria Rilke


Rilke ist auf seine Art „zeitlos“, seine religiöse Entwicklung spiegelt gesellschaftliche Prozesse wider, die auch heute noch gültig sind.


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RESEARCH REPORTS
THE DISTINCTION BETWEEN AUTHORITARIANISM AND FUNDAMENTALISM IN THREE CULTURES: FACTOR ANALYSIS AND PERSONALITY CORRELATES

Stephen W. Krauss, Heinz Streib, Barbara Keller & Christopher Silver*

ABSTRACT

The goals of the study were to examine whether fundamentalism and authoritarianism could be distinguished by the Big Five factors of personality in American, Romanian and German samples, and to determine whether fundamentalism and authoritarianism could be distinguished by factor analysis in any of the three cultures. The results in all three cultures indicate that fundamentalism and authoritarianism have virtually identical personality correlates. In all three cultures, the two constructs were indistinguishable via exploratory factor analysis and could only be distinguished via confirmatory factor analysis, although direction-of-wording effects dwarfed the differences between fundamentalism and authoritarianism. The findings suggest that researchers should view fundamentalism as religious authoritarianism, and should therefore be cautious when making inferences about religiosity from research on fundamentalism.

Research on individual difference in religion has grown remarkably in the last ten years (Emmons & Paloutzian, 2003). Special issues focusing on religion have appeared in such major personality journals as the Journal of Personality and Personality and Social Psychological Review. In addition, numerous articles dealing with religion have appeared in top journals (e.g., Burris & Tarpley, 1998; Hart, McAdams, Hirsh & Bauer, 2001; Saucier, 2000). Several issues of general interest to personality researchers remain unanswered. Specifically, it is unclear whether many of the religious constructs, such as fundamentalism, are empirically separable across cultures from general individual difference variables, such as authoritarianism. As such, the current article will explore the distinction between authoritarianism and fundamentalism in three cultures through factor analysis and their relationships to the Big Five personality factors.

* The authors would like to thank Dan Cervone, Ramona Krauss, and Linda Skitka for their comments on previous drafts of this paper.
Hunsberger and Altemeyer’s (1992) Fundamentalism scale has recently been attracting a great deal of attention. The Fundamentalism scale sprang from Altemeyer’s work on authoritarianism and was designed to measure:

the belief that there is one set of religious teaching that clearly contains the fundamental, basic, intrinsic, essential, inerrant truth about humanity and deity; that is this essential truth is fundamentally opposed by forces of evil which must be vigorously fought; that this truth must be followed today according to the fundamental, unchangeable practices of the past; and that those who believe and follow these fundamental teachings have a special relationship with the deity (Hunsberger & Altemeyer, 1992; p. 118).

Further clarifying the meaning of fundamentalism, Altemeyer (1996) stated that “fundamentalism can usually be viewed as a religious manifestation of right-wing authoritarianism . . . It is the way authoritarians react to the religious impulse” (p. 161, emphasis in the original). In other words, the fundamentalism scale was designed to measure religious authoritarianism, which is a mixture of authoritarianism and religious orthodoxy (Altemeyer, 1996; Laythe, Finkel, Bringle & Kirkpatrick, 2002). Measures of authoritarianism, such as Altemeyer’s (1988, 1996) Right-Wing Authoritarianism scale, are conceived as measuring a more general type of authoritarianism that is a mixture of aggression against sanctioned targets, submission to authority, and conventionality (Altemeyer, 1996; Hunsberger, 1995).

As one might expect, the Fundamentalism scale has consistently shown strong correlations with authoritarianism, with correlations between the two measures tending to be about .70 (Altemeyer, 1996; Hunsberger, 1995). Though correlations of this magnitude are very high, they are expected given that the Fundamentalism scale is designed to be a measure of religious authoritarianism (Altemeyer, 1996) and therefore uses conceptually overlapping items.

The distinction between authoritarianism and fundamentalism has received some attention in regards to their relationships to prejudice religion (e.g., Hunsberger & Altemeyer, 1992; Hunsberger, Alisat, Pancer, & Pratt, 1996), and complexity of thought (Hunsberger, Pratt, & Pancer, 1994). However, virtually all of these studies examined key differences that conceptually distinguish the constructs. Namely, that fundamentalists are more religious and authoritarians are more prejudiced. Yet, very little research (though see Hunsberger et al., 1994) has examined the discriminant validity of the Right-Wing
Authoritarianism (RWA) and Fundamentalism scales by general individual difference variables, such as the Big Five personality factors. In addition, previous research has not examined whether fundamentalism and RWA are distinct from one another using factor analysis. Understanding the degree of conceptual overlap between fundamentalism and RWA is important because otherwise researchers may draw incorrect or biased conclusions about extreme religious commitment and religious conservatism (cf., Smedslund, 2002).

Another limitation of the past research is that it has almost exclusively used North American, student samples. Thus, it is unclear whether fundamentalism can be distinguished from authoritarianism outside of North America.

In an effort to address some of these issues, the current study was conducted. The current study had three goals. The first goal was to examine the distinction between RWA and fundamentalism in regards to their correlations with the Big Five personality factors. The second goal was to examine whether RWA and fundamentalism can be distinguished via exploratory and confirmatory factor analysis. The third goal was to examine the distinction between RWA and fundamentalism in North American and non-North American samples, and this goal was met by using samples drawn from the U.S., Germany, and Romania.

Method

Participants and Procedure

The 297 (100 male and 195 female) U.S. participants completed the questionnaire in return for partial course credit in an introductory psychology course at a middle-sized, state university in the southeastern United States. The U.S. participants were 20 years old on average, and 66 percent of these participants reported that they were white.

The 200 (90 male and 110 female) German participants were University students and completed the questionnaire as volunteers. The German participants were 24 years old on average, and 94 percent of these participants reported that they were white.

The 235 (126 male and 108 female) Romanian participants were residents of student housing in Bucharest that had agreed to voluntarily fill out the questionnaire when approached by a student administrator. The Romanian participants were 22 years old on average, and
98 percent of these participants reported that they were ethnically Romanian.

*Measures*

To measure authoritarianism, all participants completed Altemeyer and Hunsberger’s (1992) 1990 Right-Wing Authoritarianism Scale on a five-point format (1 = strongly disagree, 5 = strongly agree). To measure religious fundamentalism, all participants completed Altemeyer and Hunsberger’s (1992) Religious Fundamentalism Scale on a five-point format (1 = strongly disagree, 5 = strongly agree). To measure personality, all participants completed Goldberg’s (1999) 100-item Big-Five Factor Markers from his International Personality Item Pool. This measure was used because it has been shown to be at least as valid as the more established measures in the U.S. (Goldberg, in press) and no established measures of the Romanian Big-Five exist.

The Romanian and German participants completed native language versions of each scale that were made using the process of backtranslation. No translation difficulties were encountered. All participants completed all the items in an identical order.

*Results*

Table 1 reports the descriptive statistics of the measures completed by all three samples. As can be seen, all of the measures consistently showed good reliability.

Table 2 shows the personality correlates of fundamentalism and authoritarianism (RWA). As can be seen, fundamentalism and RWA were strongly correlated in all three cultures, with \( r \)'s ranging from .73 to .76. Fundamentalism and RWA also had virtually identical personality correlates. Fundamentalism and RWA both tended to be positively related to conscientiousness and slightly negatively related to intellect. In addition, neither scale was related to emotional stability. However, fundamentalism and RWA’s correlates with extraversion and agreeableness appeared to be culturally dependent. In Germany, but not in the U.S. or Romania, both measures were negatively related to extraversion. In the U.S. and Romania, but not in Germany, both measures tended to be positively related with agreeableness.
Table 1  Descriptive Statistics

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Table 2  The Personality Correlates of Fundamentalism and Authoritarianism

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* p < .05. ** p < .01.

Factor Analysis

To examine whether the fundamentalism and RWA scales are distinct, a principle components analysis with orthogonal (varimax) rotation was conducted on all the RWA and Fundamentalism items. The scree plot revealed the clear presence of 2 factors in all three samples. In all three samples, the first factor was composed almost exclusively of the con-trait items of both scales. In all three samples, the second factor was composed exclusively of the pro-trait items of both scales. This suggests that in all three cultures, the fundamentalism scale was not distinguishable from RWA via exploratory factor analysis, but that the pro-trait items were distinguishable from the con-trait items. This interpretation was further explored using confirmatory factor analysis.

Unlike exploratory factor analysis, confirmatory factor analysis can examine whether the two scales are distinguishable after direction
of wording effects are controlled. To determine whether fundamentalism is separable from RWA, five different factor structures were compared separately in each of the three samples. The most basic model, the One-Factor Model, assumes that the fundamentalism scale is not distinguishable from RWA, while the Two-Factor Model assumes that they are distinguishable. In addition, because the exploratory results only showed the presence of two direction of wording factors and no RWA or fundamentalism factors, this Two Direction-of-Wording Factor Model was also examined. Last, the One- and Two-Factor models were also examined once direction-of-wording effects were controlled. These two models will be termed the One- and Two-Factor with Method Effects models.

The goodness-of-fit statistics for each of these models is shown in Table 3. As can be seen, in all three samples, the Two-Factor Model was significantly better than the One-Factor Model, but was significantly worse than the Two Direction-of-Wording Factor Model. However, the One- and Two-Factor with Method Effects models had better fit than all of the previous models in all three samples, with the Two-Factor with Method Effects models having a slightly better fit than the One-Factor with Method Effects model.

Overall, both the exploratory and confirmatory factor analytic results suggests that, in all three cultures, the pro-trait items of each scale were more similar to the pro-trait items of the other scale than they were to the con-trait items of their own scale, and vice versa. However, once these method effects were controlled, the two scales were distinguishable, which is somewhat supportive of the scales’ validity. However, controlling for the method effects resulted in excellent fit in all three cultures without assuming the two scales could be distinguished. Thus, controlling for the direction-of-wording effects did the lion’s share of the fit improvement, and accounting for the conceptual distinctions between fundamentalism and authoritarianism did relatively little extra.

**Discussion**

The major goals of the study were to examine whether fundamentalism and RWA could be distinguished using individual difference variables of general importance, namely the Big Five factors of personality, and to determine whether fundamentalism and RWA could
be distinguished by factor analysis. In general, the personality correlates of authoritarianism and fundamentalism were virtually the same in all three cultures. Thus, it appears that fundamentalism cannot be distinguished from authoritarianism based on their personality correlates. As Saucier (2000) has found, fundamentalism and authoritarianism's correlations with personality are very small, which suggests that they are largely independent of personality.

In contrast fundamentalism’s and RWA’s personality correlates, the factor analytic results in all three cultures suggest that there is a very subtle distinction between the two constructs. In fact, the distinction between fundamentalism and RWA is so subtle that it is masked by direction-of wording method effects in exploratory factor analysis, and can only be seen by confirmatory factor analysis.

Overall, the results suggest that fundamentalism and authoritarianism are very closely related constructs. Thus, the current results seem to give some support to Altemeyer’s (1996) interpretation of fundamentalism as religious authoritarianism. As such, the current results seem to suggest that researchers should view the fundamentalism literature as an outgrowth of the authoritarianism literature, as Altemeyer and Hunsberger (1992) originally did, and not as some-

<table>
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thing completely separate. Researchers ignoring the high degree of conceptual overlap between fundamentalism and authoritarianism risk designing potentially biased studies and potentially making incorrect conclusions based on their data (Smedslund, 2002). The current study also suggests that distinctions between fundamentalism and authoritarianism are small and differences may only be found in key domains that conceptually distinguish the constructs, such as prejudice and religiosity. Future research should try to find other domains that distinguish fundamentalism from authoritarianism.

References


LOOKING FOR SIGNS OF THE PRESENCE OF GOD IN NORTHERN IRELAND: RELIGIOUS EXPERIENCE AMONG CATHOLIC AND PROTESTANT SIXTH-FORM PUPILS

Tania ap Siôn

ABSTRACT

A sample of 2,359 sixth-form pupils (between the ages of 16 and 18 years) in Northern Ireland (1,093 attending seven Protestant schools and 1,266 attending nine Catholic schools) responded in 1998 to Greer’s classic question ‘Have you ever had an experience of God, for example, his presence or his help or anything else?’ Religious experience was reported by 29% of Protestant males, 29% of Catholic males, 39% of Protestant females and 38% of Catholic females. Compared with earlier data these figures reveal a particularly marked decline in reported religious experience among Catholic females (64% in 1981, 56% in 1984, 61% in 1992 and 38% in 1998). The content of the reported religious experience is analysed and illustrated within nine descriptive categories characterised as: help and guidance, exams, God’s presence, answered prayer, death, sickness, conversion, difficulty in describing, and miscellaneous.

Introduction

Empirically-based research into religious experience was given a vital new stimulus in the United Kingdom in 1969 when Sir Alister Hardy established the Religious Experience Research Unit in Oxford (Hay, 1982). Hardy was particularly interested in recording and analysing the kind of responses generated by the following question.

Have you ever been aware of or influenced by a presence or power, whether you call it God or not, which is different from your everyday self?

When this question was broadcast through the secular press Hardy was overwhelmed by the quantity and quality of the responses which were sent to him in Oxford. By the end of the 1970s the archive at the Religious Experience Research Unit contained over 4,000 accounts (Hardy, 1979:1) and many of these accounts had been
grouped into useful categories. Hardy, formerly professor of zoology at Oxford University, saw his role now as that of the natural historian, collecting and classifying specimens, somewhat like a Victorian naturalist laying down the factual basis for the theories of twentieth century biology.

Drawing on the accounts of religious experience within the archive of the Religious Experience Research Unit, Timothy Beardsworth (1977) and Edward Robinson (1977a, 1977b, 1978) began to draw the attention both of the academic community and of the wider public to the widespread persistence of religious experience in what was otherwise thought to be an increasingly secular social context. Inspired by Hardy’s original question, David Hay and his colleagues began to quantify through social surveys the prevalence of what the archive could only illustrate through qualitative evidence (Hay and Morisy, 1978, 1985; Hay and Heald, 1987). For example, Hay and Morisy (1978) found that 36% of the population responded to the Hardy question in the affirmative.

One of the early major conclusions to emerge from the Hardy archive concerned the importance of religious experiences during childhood and adolescence in shaping an affirmative response to the Hardy question. Edward Robinson’s (1977a) *The Original Vision* concentrates specifically on the religious experiences recorded in these earlier years of life. Robinson was impressed by the number of reports which began with a very clear recollection of childhood, as illustrated by the following examples. A 55-year-old woman began her account.

When I was about five I had the experience on which, in a sense, my life has been based. It has always remained real and true for me. Sitting in the garden one day... (p. 12).

A 63-year-old man began:

The first approach to a spiritual experience which I can remember must have taken place when I was five or six years old at the house where I was born and brought up. It was a calm, limpid summer morning... (p. 33).

A 40-year-old woman began:

When I was about eleven years old I spent part of a summer holiday in the Wye Valley. Waking up very early one bright morning, before
any of the household was about, I left my bed and went to kneel on the window seat. . . . I was left filled with exhilaration and exultation of spirit (p. 37).

A 76-year-old woman began:

When I was about ten I had a strange experience which I still remember quite clearly . . . (p. 114).

More recent research continues to support Robinson’s (1977a) contention regarding the importance later in life of religious experience during the early years. For example, Farmer (1992) made a study of ‘adult perspectives’ on religious experience in childhood, and Scott (2004) concentrated on ‘retrospective spiritual narratives’, exploring recalled childhood and adolescent spiritual experiences. Farmer’s (1992) research describes an adult who recalled seeing light around people and hearing their thoughts, as a 3-year-old-child (p. 263), an adult who recalled feeling a oneness with herself and with her environment as a young school child (p. 264), and another adult who recalled seeing the inner connections between all things as a child (p. 266). Scott’s (2004) research relates Nora’s account of her ability to see auras as a 4- or 5-year-old child (p. 70), Cleo’s account of intense joy when she sat one calm evening as a young teenager (p. 73), and Gwen’s account of her transformation when kneeling before ‘a larger-than-life size carved wooden statue of the Madonna’ in a shrine as a 12-year-old child (p. 74).

In spite of the importance of childhood and adolescence in shaping apparent receptivity to religious experience, as demonstrated by the Hardy research tradition, comparatively little attention has been given to researching religious experience among school pupils. The notable exceptions are provided by Elkind and Elkind (1962), Paffard (1973), Hoge and Smith (1982), Miles (1983), Robinson and Jackson (1987), and a set of studies reported by Greer (1981, 1982), Greer and Francis (1992) and Francis and Greer (1993, 1999). Recent research relevant to this field has concentrated on the much broader and considerably more nebulous construct of ‘spirituality’ rather than on the narrower and more tightly-defined construct of ‘religious experience’ (see, for example, Erricker, Ericker, Sullivan, Ota and Fletcher, 1997; Hay and Nye, 1998).

In a study entitled ‘Varieties of religious experience in young adolescents’, Elkind and Elkind (1962) found that a high percentage of
a group of 144 high school pupils in the United States of America had 'recurrent' and 'acute' experiences in which they felt close to God. In a study subtitled 'transcendental experiences in childhood and adolescence', Paffard (1973) produced evidence of the common occurrence of transcendental experience among 400 sixth-form pupils and undergraduates in England. Hoge and Smith (1982) asked a sample of 451 Catholic, Baptist and Methodist grade-ten pupils in the United States of America about definitive religious experiences in their lives, and 58% reported them. Most such experiences took place at a retreat or camp or in a church service. In a doctoral project concerned with ‘adolescents’ attitudes to and understanding of transcendental experience’, Miles (1983) undertook a detailed study among 137 sixth-form pupils in England to test three hypotheses: that transcendental experience forms an element in the experiences of adolescents; that teaching can improve students’ understanding of transcendental experience; and that understanding improves students’ attitudes toward transcendental experience. Comparisons were made between a group of 82 students who followed a taught programme about transcendental experience and a control group of 55 students.

Robinson and Jackson (1987) conducted a wide ranging questionnaire survey among 6,576 pupils from the age of 16 upwards in the United Kingdom for a study they styled Religion and Values at 16+. Factor analysis identified ten potential scales within the quantitative data generated by the survey, including measures of numinous experience and mystical experience. The survey also presented pupils with two model passages offering accounts of religious experience. These two model passages were followed by questions probing the pupils’ own understanding and experiences.

In his ambitious empirical study among children and adolescents in Finland, Religious Development in Childhood and Youth, Tamminen (1991) included an important section on religious experience, which he defines as ‘experience to which a sense of dependency on or connection with God/the divine and the transcendent is connected’ (p. 34). Two surveys conducted in 1974 and 1986 employed the two following key questions: Have you at times felt that God is particularly close to you?; Have you at times felt that God is guiding, directing your life? Each question was followed by a probe to generate a narrative description of the experience.

Greer’s research is of particular interest for two reasons. The first reason is that the research was conducted in Northern Ireland which
is not only an especially religious context, but also one which is significantly divided between Protestant and Catholic communities (Cairns and Darby, 1998; Barnes, 2005a, 2005b). Greer’s research was conducted within both Protestant and Catholic schools. The second reason is that Greer’s programme of research has employed the same question in a series of studies among well-defined cross-sectional samples of secondary school pupils. These studies have consistently included the question ‘Have you ever had an experience of God, for example, his presence or his help or anything else?’

Greer’s first study employing this question was conducted in 1978 among 1,872 upper sixth-form pupils at controlled or Protestant voluntary schools. In his report of this study Greer (1981) found that 38% of the males and 51% of the females gave a positive response to his religious experience question. Greer employed the question for the second time in 1981 among 940 Catholic and 1,193 Protestant pupils between the ages of 12 and 17 attending 19 secondary and grammar schools. According to Greer (1982) this time the answer ‘yes’ was given to the religious experience question by 31% of the Protestant males, 39% of the Protestant females, 35% of the Catholic males and 64% of the Catholic females. In this study Greer found no significant age differences in the proportions of pupils who reported religious experience.

Greer employed the question for the third time in 1984 among 1,177 fourth-, fifth- and sixth-form pupils from ten Protestant and ten Catholic schools. According to Francis and Greer (1993) this time the answer ‘yes’ was given by 26% of the Protestant males, 38% of the Protestant females, 34% of the Catholic males and 56% of the Catholic females. Greer employed the question for the fourth time during the school year 1991–1992 among 2,129 third-, fourth-, fifth- and sixth-form pupils attending 12 Protestant and 12 Catholic grammar schools. According to Francis and Greer (1999) this time the answer ‘yes’ was given by 37% of the Protestant males, 56% of the Protestant females, 49% of the Catholic males and 61% of the Catholic females.

In addition to providing information about the level of reported religious experience among Protestant and Catholic pupils, Greer’s surveys facilitated two other strands of enquiry. One strand explored the relationship between reported religious experience and attitude toward Christianity among Protestant and Catholic adolescents in Northern Ireland. The three analyses reported by Greer and Francis
and by Francis and Greer (1993, 1999) all supported the hypothesis that the acknowledgement and naming of personal religious experiences is associated with the formation of more positive attitudes toward Christianity within Northern Ireland.

The other strand gave attention to a different kind of data provided by the pupils. In the two studies conducted in 1978 and in 1981 Greer invited those pupils who gave the answer ‘yes’ to his religious experience question to ‘describe this experience if you can’. In the 1978 study 28% of the pupils accepted the invitation to describe their religious experience and in the 1981 study 31% did so. The two analyses reported by Greer (1981, 1982) attempted to categorise these descriptions of religious experience within discrete groups. Greer (1981) proposed nine categories which he characterised as: guidance and help, examinations, depression and sickness, death, answered prayer, God’s presence, conversion experiences, good experiences, and miscellaneous. Greer (1982) reduced the number of categories to eight by eliminating the category ‘good experience’. Greer fully recognised the arbitrary and problematic process of attempting to assign each account to one category.

It may be pointed out that a number of replies referred to several experiences, for example, guidance and answered prayer. Such multiple answers were for convenience classified, sometimes arbitrarily, under the heading which seemed most appropriate. The classifications of replies might well have been carried out differently and there was no attempt at standardisation (Greer, 1981:24).

In spite of these acknowledged limitations, the two studies reported by Greer (1981, 1982) provide valuable insights into the ways in which young people in Northern Ireland reported and interpreted religious experience. Unfortunately the invitation to describe their religious experience was not extended to pupils in the 1984 and 1991–1992 surveys.

Against this background the aim of the present study was to replicate Greer’s earlier research in 1998. In the intervening years since the studies conducted in 1978 and 1981 a number of commentators had begun to suggest that the religious climate of Northern Ireland was undergoing considerable change. Although self-expressed religious affiliation remained high and religious practice remained high, especially within the Catholic community, studies like Mitchell’s (2005) qualitative research conducted in 2000 suggested that religious affiliation
and religious practice in Northern Ireland were functioning largely as vehicles to convey social and cultural identity rather than to signify real religious belief or commitment to faith. An enquiry into how young people in Northern Ireland respond to Greer’s religious experience question and into the extent to which they continue to volunteer to provide descriptions of religious experience may provide a good test of the extent to which the religious climate of Northern Ireland has or has not undergone profound change during that twenty year period.

Method

Sample
Staff within a random sample of seven Protestant schools (including single-sex schools for boys only) and nine Catholic schools (including single-sex schools for girls only) were invited to administer the research instrument to their lower and upper sixth form pupils. The questionnaires were administered by teachers according to a standardised procedure, emphasising confidentiality and anonymity and with the assurance that the responses would not be inspected by school staff. Although given the option not to participate in the project, very few pupils refrained from participation. Thoroughly completed questionnaires were submitted by 2,359 pupils (600 aged 16 years, 1,160 aged 17 years and 599 aged 18 years), 1,093 of whom were attending Protestant schools (702 males and 391 females) and 1,266 attending Catholic schools (488 males and 778 females).

Instrument
Alongside a full range of questions concerned with the dimensions of religious affiliation, belief, and practice, the questionnaire included Greer’s (1981, 1982) question concerned with religious experience: ‘Have you ever had an experience of God, for example, his presence or his help or anything else?’ This question was followed by dichotomous response categories: yes and no. Those pupils who checked the positive response were then given the following invitation: ‘Please describe this experience if you can.’
Overview

Overall 791 (33%) of the pupils reported that they had recognised at some time in their life an experience of God. The level of reported religious experience varied according to sex, but not according to denomination: religious experience was reported by 29% of males in Protestant schools, 29% of males in Catholic schools, 39% of females in Protestant schools and 38% of females in Catholic schools. The proportions of the pupils who then proceeded to describe their religious experience varied according to denomination, but not according to sex: among those who reported religious experiences, these experiences were described by 52% of males and 57% of females in Protestant schools and by 80% of males and 80% of females in Catholic schools. Overall 544 (23%) of the pupils provided a description of religious experience.

Categorising religious experience

Greer’s (1982) original research identified eight main categories of religious experience: help and guidance, exams, sickness, death, answered prayer, God’s presence, conversion and miscellaneous. Greer allocated individual responses describing religious experience to just one of these categories. In order to test the robustness of Greer’s original methodology, the first phase of data analysis employed content analysis to locate each of the 544 described experiences within one category. This methodology generated the following hierarchy of categories: help and guidance (25%), exams (16%), God’s presence (16%), answered prayer (12%), death (8%), sickness (7%) and conversion (1%), with the remaining 15% classified as miscellaneous. Table 1 illustrates how these categories varied according to sex and denomination.
Looking for signs of the presence of God in N. Ireland

Table 1 Classification of described religious experiences by sex and denomination

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This first phase of data analysis identified two main shortcomings in Greer’s original methodology. The first shortcoming with Greer’s categorisation is that it allows each reported religious experience to be located within only one category. Paffard (1973), in Inglorious Wordsworths: a study of transcendental experiences in childhood and adolescence, employed a different method of categorisation which allows each reported experience to be located within up to two categories. As a significant number of the responses to the current survey potentially fell into more than one category, Paffard’s scheme may provide a more accurate picture of the distribution of the responses within the various categories. The second shortcoming identified in Greer’s original methodology relates to the ability of Greer’s categories to represent the range of responses adequately. In the present study the use of Greer’s categories alone yielded a high percentage of responses located in the miscellaneous category. The introduction of an additional category which indicated an inability, difficulty, or unwillingness to describe a religious experience may significantly reduce the percentage of responses in the miscellaneous category.

After modifications were made to Greer’s approach to categorising religious experience, by combining it with Paffard’s method and including the additional category, the second phase of data analysis employed content analysis to locate each of the 544 described experiences within up to two categories. This revised methodology produced the following hierarchy of categories: help and guidance (58%), exams (18%), God’s presence (19%), answered prayer (21%), death
(9%), sickness (10%) and conversion (1%), difficulty in describing (6%), with the remaining 9% classified as miscellaneous. Table 2 illustrates how these categories varied according to sex and denomination.

Table 2  Classification of described religious experience by sex and denomination

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</table>

**Sex and denominational difference**

The main sex and denominational differences identified in table two have been confirmed by the chi square test of statistical significance, collapsing the data into a series of $2 \times 2$ contingency tables. Help and guidance was cited by a higher proportion of females (58%) than males (27%) among the Protestants ($X^2 = 19.4$, $p < .001$) and by a higher proportion of females (80%) than males (39%) among the Catholics ($X^2 = 56.9$, $p < .001$). Exams were cited by a higher proportion of Catholic males (28%) than was the case among the other three groups ($X^2 = 9.9$, $p < .01$) of Catholic females (16%), Protestant males (14%) and Protestant females (14%). God’s presence was cited by a higher proportion of Protestant females (30%) than was the case among the other three groups ($X^2 = 11.2$, $p < .001$) of Protestant males (17%), Catholic males (10%) and Catholic females (18%). Death was cited by a higher proportion of Catholics (11% males and 11% females) than Protestants (2% males and 8% females) ($X^2 = 5.3$, $p < .05$). Sickness was cited by a lower proportion of males (3% Protestants and 9% Catholics) than females (7% Protestants and 14% Catholics) ($X^2 = 3.9$, $p < .05$). Conversion was cited by a higher proportion of Protestants (6% male and 3% female)
than Catholics (0% males and 0% females) ($X^2 = 14.9, p < .001$). Difficulty in describing and miscellaneous responses were cited by a higher proportion of Protestant males (10% difficulty in describing and 22% miscellaneous) than was the case among the other three groups ($X^2 = 25.0, p < .001$) of Protestant females (4% difficulty in describing and 6% miscellaneous), Catholic males (6% difficulty in describing and 9% miscellaneous) and Catholic females (5% difficulty in describing and 6% miscellaneous). There were no significance differences by sex and denomination in respect of answered prayer.

**Exemplification of categories**

The exemplification of categories is based on the modified version of Greer’s scheme. Each cited example is identified by denomination and sex: Protestant male (Pm), Protestant female (Pf), Catholic male (Cm) and Catholic female (Cf).

**Help and guidance**

Responses included in the help and guidance category are general references to help and guidance. Specific references to help and guidance which fall clearly into one of the other eight categories are not included. Overlaps do occur with other categories but only when there is a general reference to help or guidance in addition to the specific examples.

- Physical help and energy. (Pm)
  - I asked him for help and he helped me. (Pf)
  - His help and guidance. (Cm)
  - His help when I need it. (Cf)

References to specific instances of help and guidance are cited by both sexes and denominations and included parental separation, bullying, debt, and the Duke of Edinburgh Award.

- When I was 11 and my parents split up and at a Baptist youth camp when I was 12. He helped me to accept what was happening and to stop crying. (Pf)

Some Catholic males and Catholic females referred to help in resisting temptation.

- I was helped through a time of temptation. (Cm)
Both sexes and denominations often referred to help and guidance during difficult times or times of need, although there are a few examples of recording God’s help and guidance in the good times and when things go well.

Everyday I feel God’s help in getting through the day and his blessings in all the good things I have. (Cf)

Both sexes and denominations often emphasise the everyday, frequent nature of the help and guidance as well as its ordinariness.

He helps me everyday. (Pm)
Not anything spectacular, just basically help in life and in everyday situations. (Pf)
Helping me in daily life. (Cm)
God always helps me in my daily life, he is a comfort everyday. (Cf)

Protestant males and Protestant females and Catholic females referred specifically to help and guidance in a decision-making context, with some Protestant males and Protestant females referring to the use of bible notes or readings in this process.

Help to live a good life through daily bible readings etc. (Pm)
By praying—feel like getting help—eases decision making. (Cf)

Exams

Responses included within the examination category are exams in general, GCSEs, 11+ exams, studying, revision, driving tests and competitive sports. Both sexes and denominations recorded a conviction that God has either helped at specific times in the past or helps with exam success in general. In some responses, exam success was explicitly linked to prayer.

He helped me pass my 11+ and GCSEs. (Pm)
Good exam results—prayed for them. (Pf)
Praying before exams and achieving. (Cm)
This may sound stupid I feel without his help I would not have passed my GCSE’s. I prayed to him before each exam and I did much much better than I thought. (Cf)

Some Catholic males and Catholic females reported feelings of confidence, strength, and calmness associated with their religious experiences.
When coming up to exams I pray for help and by doing this I feel more confident and relaxed I know I will do well. (Cm)
Help in exams—a feeling of calm etc. This leads to success in exams (hopefully/thankfully!). (Gf)

Some Catholic males and a Protestant female referred to God’s guidance in the examination process.

With his guidance I was able to do well in my exams. (Cm)
When stressing over my exams, I was reading my daily reading notes and a verse was very helpful to me. It said that you must seek God and he will help you and guide you. (Pf)

God’s presence

Within the category of God’s presence a number of themes emerged relating to the frequency and context of the experiences, and feelings associated with them. Protestant males and Protestant females often described God as being a constant presence.

Just knowing that he is always there being a close friend and listening. (Pm)
Although I am not a very religious person, I always feel God’s presence. I feel he is always here with me. (Pf)

Other Protestant males, Protestant females, and Catholic females often described God as being a frequent or a regular presence in their lives. Catholic males almost always gave specific concrete examples of God’s presence in their lives without reference to frequency.
Both sexes and denominations cited particular contexts for their experiences of God’s presence which most often referred to difficult or stressful periods in their lives (death, exams, and problems at school), and specific religious contexts (prayer, meditation, and worship).

In trying situations I feel God help and presence which reassures me. (Pm)
When it comes to taking communion at church, I can feel God’s presence. (Pf)
I feel if you pray to God you can feel his presence and he will help you (e.g.) Exams. (Cm)
Whenever I feel alone, scared or hurt I feel God’s arms around me and feel his presence, this comforts me and makes me feel better. (Gf)

Some Catholic females reported experiencing the presence of God in nature and people.
I have experienced God in many occasions while in prayer, in the beauty of nature and in the kindness of other people. (Cf)

Some Catholic females reported experiencing the presence of God in denominationally linked locations (Lourdes), activities (confession), and figures (Mary and guardian angels).

I was able to feel God’s presence when I went to Lourdes. (Cf)

Both sexes and denominations described feelings experienced with God’s presence. Protestant females and Catholic females described feelings more frequently and in greater detail than Protestant males and Catholic males. Most of the feelings were described in positive terms and included feelings of calm, peace, relaxation, harmony, contentment, love, warmth, comfort, happiness, well-being, security, safety, support and strength.

... there was a strong and comforting presence, and to all my questions, answers suggested themselves into my head, as if I’d just worked them out, but without conscious thought. (Pm)
I feel relaxed, content, refreshed, happy knowing that he is there with me. (Pf)
An overwhelming sensation of well being and hope for no apparent reason whilst praying. (Cm)
... a feeling of peace, of calm, of harmony of joy. (Cf)

Some Protestant males and Protestant females commented on the powerful, astounding and emotional nature of their experiences.

It was magic and it felt very powerful. (Pm)
Knowing that there is somewhere, a feeling that is so astounding, its hard to explain. (Pf)

Answered prayer

Within the category of answered prayer a number of themes emerged relating to both general and specific instances of answered prayer. Both sexes and denominations made many general statements about their belief in answered prayer, including some references to answered prayer in times of need, or when guidance was required.

Answered prayers when I was afraid. (Pm)
Prayers have been answered. (Pf)
God answers prayer when we are most in need. (Cm)
Most things I pray for and ask for are granted. (Cf)
Other responses from both sexes and denominations cited specific examples when prayer was believed to have been answered. The examples shared by both sexes and denominations included answered prayer in exam and illness contexts.

I asked for help to achieve good exam results and he helped me to achieve these. (Pm)
My mum had a cancerous growth, we all prayed extremely hard and it went away. (Pf)
Any time I had relatives very, very ill if I prayed they recovered. (Cm)
I asked for his help during my exams and received it. (Cf)

Other examples cited by individual groups included answered prayer in relation to death, relationships, sport, competitions, guidance and protection.

I asked for a relationship with a girl to go better recently and it did. (Pm)
I had a difficult moral situation with which I was unsure what I was going to do, so I prayed and God gave me strength and showed me the right answer. (Pf)
Playing a Gaelic match, didn’t score for five matches before. Said prayer before match to help score. In the first minute I scored. (Cm)
When my granda died (who I was very close to) I asked God for a sign that granda was alright. I felt a strange tingling sensation through my whole body—a presence which is very hard to describe—and which sounds so ridiculous that I have never told anyone before. (Cf)

Some Protestant females and Catholic females referred to answered prayers in relation to the welfare and safety of family, friends, and themselves more often that Protestant males or Catholic males.

Ongoing help and answers to prayer eg the saving of friends. (Pf)
My daily prayers are answered—my family and friends are safe and well and most importantly loving and supporting. (Cf)

Some Catholic males and Catholic females observed that God answers prayer in his own way.

I have prayed to God for many things and have received what I have asked for in prayer most of the time. When I pray for something and don’t get it, I know that God has not given me it for my own good. (Cm)
There isn’t one outstanding event, I pray to God for help and guidance and I believe he does answer me in his own way. (Cf)

Some Catholic females recorded answered prayers in relation to saints.
When I lose something, pray to Saint Anthony and normally I will find it. (Cf)

Some Catholic males recorded that they had prayed successfully for ‘favours.’

Praying for favours which I have received. (Cm)

Death

Responses included in the death category are deaths of relatives and friends, suicidal feelings, and life-threatening experiences. Both sexes and denominations recorded religious experiences when relatives died.

To ‘get over’ the death of a family member. (Pm)
When someone in my family died, God helped me through that time. (Pf)
Helping me through death of Grandfather. (Cm)
He helped me through the death of a friend. (Cf)

Both sexes and denominations often described their religious experiences during family bereavements in positive terms referring to feelings of comfort, strength, ability to cope, support, security, peace, comfort, and calmness.

When my grandmother died. God was a comforter. (Pm)
A deep sense of peace and love, during difficult and sad times, e.g. when a close relative died recently. Calmness. It helped me cope with loss. (Pf)
When my Granny died I was very depressed but I looked to God for comfort and he give it to me, as I managed to cope. (Cm)
It was a calming influence when he helped me through a family bereavement. (Cf)

Some Catholic males and Catholic females recorded an initial distancing from God during bereavement, before an understanding and acceptance of what had taken place.

When my father died two years ago, I felt God helped me. Initially I blamed [him for] my father’s death but then spoke to him and prayed to him for help. (Cm)
When my 2 year old cousin died I hated God and thought he did not exist. During this time I was not coping well with her death. When I began to think that God actually did exist and had taken her for a reason and could help me to cope, I began to come to terms with her death. (Cf)
Some Protestant females and a Catholic female recorded God’s help in coping with their own suicidal feelings.

Everyday He gives me the strength and courage to go on and He helped me through His word to get through a suicide attempt. (Pf) I took an overdose of paracetamol tablets when I was 15 and have the strength to get on with my life because I refound my faith in God. (Cf)

Some Protestant females, Catholic males and Catholic females recorded God’s intervention and help in life-threatening experiences presented in comparatively extensive narratives.

When I was about 8, I was playing with a rope, and it accidentally got caught around my neck. I could easily have been strangled but just then my father came and helped me to get it from my neck (saved my life). I have often thought that that was God who helped me at that time, by sending my father to help me. (Pf)

As I was walking home from school a lorry carrying building materials crashed about 20 m in front of me. If I hadn’t stopped to say hello to a friend a few minutes before then I probably would have been killed. I felt that God had helped me and kept me alive by sending a friend to me. (Cm)

Sickness

Responses included in the category of sickness are sickness relating to family, friends and personal sickness. Both sexes and denominations reported positive religious experiences when God provided help during illnesses of family and friends.

Helped me and my brother through an illness my brother had. (Pm) His help when a family member was very ill, he gave me strength to cope with the situation. (Pf)

. . . when my mum is unwell I feel God gives me confidence and awareness. (Cm)

God helps me through exams and when people in my family are sick. (Cf)

Within these positive religious experiences, both sexes and denominations provided examples of answered prayer in relation to illness, where the sick person was either cured or improved.

A friend of mine had meningitis, I prayed for him every night and I believe God healed him. (Pm)

My little brother was very ill. I prayed he would survive and the next
day he was taken off his ventilator and allowed to breathe for himself. He is now completely healthy. (Pf)

Anytime I had relatives very, very ill if I prayed they recovered. (Cm)

My sister was sick and I prayed. She has cerebral palsy but I know God is helping her make a steady, constant improvement. (Cf)

However, some Catholic females described instances of unanswered prayer in relation to sickness and the feelings associated with this.

I doubted God when a friend of mine was in a coma for 10 days everyone prayed but it was no Good God took her from us at 18 years old I know I should not hold it against him since he helped my cousin but I cant help it she was so young and had so much going for her. (Cf)

Some Protestant males, Catholic males and Catholic females referred to God’s help during personal illnesses, which included depression as well as physical illness.

Helps me get through states of depression. (Pm)

I believe that God pulled me through a period of severe depression. (Cm)

I suffered from an illness sought help in God and then got better. (Cf)

Both a Catholic male and a Catholic female reported the presence of God through working with sick people.

Coping with family bereavement and working with terminally ill. (Cm)

Although I won’t say I have ever seen God, I do go to Lourdes every year to help the sick. Through this I have become more aware of his presence always around me. (Cf)

Some Catholic males and Catholic females used denominationally linked references in their descriptions.

In hospital with meningitis—could have died but pulled through—complete recovery—mum bought rosary beads when I became aware again and I prayed every night after coming out of intensive care—eased my state of mind and helped me to cope. (Cm)

My boyfriend’s mother took a brain hemorrhage. After weeks of prayer from hundreds of people and many visitations from nuns, priests and faith healers she came around. I now strongly believe in the use of prayer especially the prayer to St Joseph. (Cf)

Conversion

Both Protestant males and Protestant females reported religious experiences in conjunction with conversion to Christianity. In each
example, Protestant females referred to God’s presence from conversion to the present, as either a constant or frequent phenomenon. Protestant males usually referred to the religious experience at the time of conversion.

When I became a Christian, I felt God around me. (Pm)
Since becoming a Christian I feel his presence and help everyday. (Pf)

**Difficulty in describing**

Responses included in the difficulty in describing category are the inability or refusal to describe as well as the difficulty in describing the religious experience. Both sexes and denominations gave examples of these three types of responses. Both sexes and denominations also commented on the personal and private nature of their religious experience.

It is a personal matter. (Pm)
I wish not to describe this experience. (Pf)
Too hard to explain. (Cm)
Not willing to share just yet. (Cf)

**Miscellaneous**

Responses included in the miscellaneous category do not fit into any of the other eight categories either because of their general and non-specific nature or because they were not clearly related to the question asked in the questionnaire. A few responses recorded relevant religious experiences but were numerically too few to generate a new category.

**Conclusion**

Building on the research tradition pioneered by John Greer in 1978, the present study has examined the reporting of religious experience in 1998 by a sample of 2,359 sixth-form pupils in Northern Ireland (1,093 attending seven Protestant schools and 1,266 attending nine Catholic schools). Four main conclusions emerge from the analyses of these data.

The first conclusion concerns the utility of Greer’s original question: ‘Have you ever had an experience of God, for example, his presence or his help or anything else?’ Both in the late 1970s and the late 1990s this relatively simple and basic question generated a
wide range of insightful responses into the ways in which young people conceptualise and discuss their religious experiences. The question can be commended for future research.

The second conclusion concerns the stability of the categories employed by young people in Northern Ireland to describe their religious experiences over the two decades between 1978 and 1998. With relatively minor modification, Greer’s categories remain useful and can be commended for future research.

The third conclusion concerns the methodology for classifying reported religious experiences. The original method proposed by Greer (1981, 1982) attempted to assign each reported religious experience to just one category. Building on the different method proposed by Paffard (1973), the present study has assigned each reported religious experience to either one or two categories. This revised method enables a fuller description of the data and does better justice to the rich resource materials. The revised methodology can be commended for future research.

The fourth conclusion concerns interpreting the stability and the shifts in the levels of reported religious experience among young people in Northern Ireland between 1978 and 1998. On the one hand, one set of data suggests that religious belief and practice remains very high in Northern Ireland. For example, the quantitative data published by Brierley (2003:2.21) calculated church membership for 2002 as representing 55.9% of the population of Northern Ireland, compared with 17.4% in Scotland, 8.2% in Wales and 7.2% in England. On the other hand, a second set of data suggests that religious belief and practice in Northern Ireland may be functioning largely as vehicles to convey social and cultural identity rather than to signify real religious belief and commitment to faith. In the present study religious experience has been advanced as a way of adjudicating between these two interpretations. For young people to describe an experience of God suggests that religious categories and religious language retain real saliency for them. If religion has been declining in Northern Ireland between 1978 and 1998 we would expect such decline to be reflected in the proportion of pupils who claim religious experiences. The data provide a highly nuanced answer to this question.

On the one hand, changes over the twenty-year period have not been that startling and pronounced among Protestant males, Protestant females and Catholic males. Over the period 1978 to 1992 responses from Protestant males fluctuated between 26% and 28% and stood
at 29% in 1998. Over the period 1978 to 1992 responses from Protestant females fluctuated between 38% and 56% and stood at 39% in 1998. Over the period 1981 to 1992 responses among Catholic males fluctuated between 34% and 49% and stood at 29% in 1998. These figures cannot be interpreted as illustrating a great change in religiosity among these three groups of pupils. On the other hand, the profile of responses among Catholic females follows a different trajectory. Over the period 1981 to 1992 responses among Catholic females remained relatively stable between 56% and 64%, but fell dramatically to 38% in 1998. Given the historic and important role of female faith within the Catholic Church in Northern Ireland, these figures may indeed reflect a serious erosion in religion where it has been strongest in Northern Ireland. Further research is now needed to account for such erosion. One possible explanation may be related to the high profile scandals which have rocked the Catholic Church in recent years.

Given the valuable insights into religious change which have been generated by the series of studies between 1978 and 1998, the further replication of the study can be commended, ideally in 2008.

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