DIAGNOSING BIAS IN PHILOSOPHY OF RELIGION

ABSTRACT

Work in philosophy of religion exhibits at least four symptoms of poor health: it is too partisan, too polemical, too narrow in its focus, and too often evaluated using criteria that are theological or religious instead of philosophical. Our diagnosis is that, because of the emotional and psychosocial aspects of religion, many philosophers of religion suffer from cognitive biases and group influence. We support this diagnosis in two ways. First, we examine work in psychology on cognitive biases and their affective triggers. This work supports the view that, while cognitive biases are no doubt a problem in all inquiry and in all areas of philosophy, they are particularly damaging to inquiry in philosophy of religion. Second, we examine work in social and evolutionary psychology on religious sociality and its attendant emotions. This work establishes that the coalitional features of religion are correlated with group bias, and we contend that this bias is also harmful to inquiry in philosophy of religion. We close by offering both a prognosis and recommendations for treatment.

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What is the first business of philosophy? To part with self-conceit. For it is impossible for anyone to begin to learn what he thinks that he already knows.

—Epictetus, *Discourses*,
Book 2, Ch. 17

I think it clearly and abundantly evident that true religion lies very much in the affections.

—Jonathan Edwards,
A Treatise Concerning Religious Affections, Part 3

1. Symptoms

It is widely believed, at least by philosophers of religion, that philosophy of religion is flourishing. It is not difficult to find evidence

supporting this optimistic assessment. For example, many university students at all levels are intensely interested in the subject, and philosophy of religion garners far more attention from people outside academia than most other areas of philosophy. Also, in terms of sheer quantity of articles, books, conferences, and specialty journals, philosophy of religion compares favorably with many other areas of philosophy. This has not always been so. Philosophers of religion today, including the two of us, owe a considerable debt of gratitude to the extraordinarily talented philosophers responsible for the growth of philosophy of religion in the second half of the twentieth century. Their own careers would not have been possible were it not for ground-breaking work by distinguished thinkers like William Alston, Nelson Pike, Alvin Plantinga, William Rowe, and Richard Swinburne, to mention just a few.

Having said that, our role in this paper will be that of the proverbial skunk at the garden party. For in spite of the recent expansion of work in philosophy of religion, it exhibits at least four symptoms of poor health: it is too partisan, too polemical, too narrow in its focus, and too often evaluated using criteria that are theological or religious instead of philosophical. Before we offer any diagnosis, we describe these symptoms in more detail. We do not, however, try to *prove* that philosophy of religion exhibits these symptoms. Instead, we assume that most philosophers familiar with the literature in philosophy of religion will easily recognize them.

Partisanship is so entrenched that most philosophers of religion, instead of being alarmed by it, just take it for granted. This manifests itself in a variety of ways. For example, for the sake of balance, editors of collections on topics in philosophy of religion usually invite both theists and nontheists to contribute, *assuming that they know which side each will take on the topic of the collection*, even when taking the unexpected side is perfectly compatible with the authors' theism or nontheism. A philosopher of religion who is a theist, for example, could consistently admit (and even defend the view) that horrendous evil is strong evidence against theism, so long as they think, for instance, that this evidence is outweighed by even stronger evidence (whether inferential or noninferential) on the other side. Yet such admissions almost never occur. Acceptance of partisanship also infects terminology. For example, one of two main approaches to defending theism against arguments from evil has been

dubbed (unfortunately, one of us coined the term) 'skeptical theism,' which seems to imply that only theists could possibly believe that this objection refutes even a single argument from evil. Even a philosopher like Swinburne, who demands evidence for his religious views (and has very precise standards of what counts as evidence), takes partisanship for granted when he says that philosophical theists endeavor to provide "cogent arguments for the existence of . . . God" (2001, 3) while philosophers who are atheists "endeavor to show that there is no God" (2001, 5). We wonder whether anyone endeavors to construct *good* arguments concerning God's existence, regardless of the conclusion of those arguments.

In addition to being too partisan, philosophy of religion is often strangely and unnecessarily polemical. So far as we know, it is the only area of philosophy in which philosophical opponents are labeled as "enemies" (Peter van Inwagen [2006, 6], referring to those who use the fact of evil to "attack" theism); in which an argument is called "triumphant" by someone who admits that it fails to establish its conclusion (Alvin Plantinga [1974, 111], referring to the ontological argument); and in which opposition to a position that is *obviously* compatible with most knowledge is described as "a fight for all knowledge" (Michael Ruse [1982, 326–27], referring to his defense of evolutionary biology against creationism).

A third, less obvious though ultimately more important, symptom of poor health in contemporary philosophy of religion is the narrowness of its focus. Typically, religion is unreflectively equated with some form of theism or even classical theism, and atheism is equated with naturalism or even physicalism, ignoring the broad and plausible territory between those extremes. Alternatives like "generic theism" (that is, theism combined with a rejection of all alleged special revelations), pantheism, ietsism, and deism are rarely mentioned, and when they are mentioned they are usually dismissed as positions that very few people hold, which is not only *spectacularly* false, but hardly an appropriate constraint on philosophical inquiry. Even worse, it is often just assumed that the only viable forms of theism are Muslim, Christian, or Jewish. Nothing equaling this extraordinary lack of interest in the full range of plausible positions can to our knowledge be found in any other area of philosophy.

Finally, work in philosophy of religion is too often criticized on theological or religious grounds. For example, positions on an issue are often

dismissed simply because they are incompatible with scripture, or more often, with a particular controversial interpretation of scripture that is just assumed to be correct. Reinforcing such behavior is the fact that the motto of one of the premier journals in the field is "faith seeking understanding." This motto echoes the belief of some of the most influential philosophers of religion (e.g. Plantinga, 1984) that philosophers who happen to be Christians should take the truth of Christian doctrines (as they happen to interpret them) as a starting point for *philosophical* inquiry. (More on this in section six.) Another example of this symptom concerns the project of constructing arguments for God's existence, which is too often dismissed as wrong-headed or worthless or at best unnecessary on the grounds that such arguments are religiously irrelevant: they possess no significant apologetic or devotional value, they can't lead to true faith, and they are superfluous given that we all have available either a *sensus divinitatis* or a God who stands ready to assist if only we *sincerely* open our hearts to the truth. We disagree with the premise of this argument, but our concern here is with the inference, which involves the assumption that the only value such arguments could possibly have is religious (and more specifically Christian or Jewish or Muslim). Could they not also have metaphysical or, more broadly, philosophical value? In response to such objections to what is unfortunately still called natural *theology*, philosophers of religion should insist that they are *philosophers*, not *theologians*. Although their work may have religious value, they should object most strongly to the view that it must have such value in order to be worth doing at all.

2. Diagnosis

Part of the motivation for this paper is that the disease responsible for the four symptoms described above is often misdiagnosed. Many philosophers believe that with the rise of the Society of Christian Philosophers, philosophy of religion has become little more than thinly veiled apologetics. While it is true that some people who have doctorates in philosophy and publish in philosophy of religion are Christian apologists, the vast majority of philosophers of religion do not, when engaged in philosophical inquiry, *consciously* pursue any religious agenda. Those who think, for example, that the Center for Philosophy of Religion at the University of Notre Dame is some kind of Christian think tank have never had a fel-

lowship there. (Collectively we have had five.) Thus, the fact that apologetics occasionally masquerades as philosophy may be considered a further symptom of poor health, but it does not come close to getting to the heart of what ails philosophy of religion.

Our diagnostic hypothesis is that a variety of cognitive biases operating at the nonconscious level, combined with an unhealthy dose of group influence, explain to some significant degree all of these symptoms. Thus, our focus is on the implications of work in psychology, not for the rationality of religious beliefs per se, but for the rationality or objectivity of philosophical inquiry about religion. We believe that available data also have implications for the rationality of religious beliefs, but those implications will be discussed by one of us in a companion paper. In the next two sections, we review experiments on cognitive biases and their affective triggers, arguing that the emotional features of religion make many philosophers of religion particularly vulnerable to these biases. In a fifth section, we focus on relevant work in social and evolutionary psychology, arguing that the coalitional features of religion lead to group bias in philosophy of religion. Finally, after responding to objections in section six, we devote a seventh section both to discussing the implications of our diagnosis for the future of philosophy of religion and to making a number of recommendations designed to improve the health of this important and central area of philosophy.

3. Predisposing Factors

In this section we examine evidence that cognition is subject to a number of well-documented biases and argue that cognizing in all areas of philosophy (not just in philosophy of religion) is potentially vulnerable to these biases. In the next section we show that work in psychology on the affective origins of cognitive biases coupled with information about the emotional correlates of religiosity supports our position that these biases are partly responsible for the poor health of philosophy of religion. This work also helps to explain why the sorts of symptoms observed in philosophy of religion are neither as common nor as severe in most other areas of philosophy.

The ubiquity of cognitive bias in multiple forms has been confirmed by a variety of experiments. In one influential experiment relevant for understanding the psychology of philosophical reasoning, researchers

investigated effects of argumentation on proponents and opponents of capital punishment (Lord, Ross, and Lepper 1979). Both sets of participants read summaries of the procedures, results, and critiques of studies of the deterrent effects of capital punishment. One set of documents provided evidence of the deterrent efficacy of punishment, and this set referred to research done in the same U.S. state before and after capital punishment was instituted. The other set of documents provided evidence of the deterrent inefficacy of punishment, and this set referred to research done in different states, some with and some without capital punishment. Half of each group was given the first set showing deterrent efficacy and half of each group was given the second set showing inefficacy. In other words, half of each group had their preferred beliefs confirmed by the available evidence and half of each group had them disconfirmed.

The results exhibited a pattern of bias that became a focus of continued research in subsequent decades. Participants in both groups considered the documents *supporting* their convictions to contain well-designed studies offering valuable evidence about the utility of capital punishment. Participants did not ignore counterevidence to their convictions; instead they thoroughly, carefully *criticized* such evidence. Participants on both sides did not reason impartially, weighing the evidence on both sides independent of their own commitments. Instead, they critically considered the opposite theory more carefully in order to buffer counterevidence with consonant information. Thomas Gilovich, whose lab has tested self-deceptive biases in social contexts, comments on the Lord, Ross, and Lepper study: "participants' attitudes became polarized: exposure to a mixed body of evidence made both sides even more convinced of the fundamental soundness of their original beliefs" (1993, 54).

Of course, biased responses to dissonant evidence are just the tip of the iceberg. The pervasiveness of cognitive bias in a huge variety of forms has been established by hundreds of experiments. For an excellent survey of literature prior to 1995 on how evidence is interpreted or sought in ways that are partial to existing beliefs or even to hypotheses that one happens to have "in hand," see Nickerson (1998). In a more recent study that overcomes problems about the subjective rather than direct measure of polarization used by Lord, Ross, and Lepper, Taber and Lodge (2006) presented subjects with arguments for and against affirmative action and gun control. In addition to testing hypotheses about prior-attitude effects,

confirmation bias, and disconfirmation bias, they also tested hypotheses about attitude polarization, attitude strength, and a sophistication effect. Unsurprisingly, in the case of confirmation bias, it was found for all groups examined that proponents of an issue sought out more *supporting* than *opposing* arguments. This effect was *significantly more pronounced for sophisticated respondents*, who selected like-minded arguments 70–75 percent of the time. In the case of disconfirmation bias, results showed that participants in both studies, across both issues, took longer to read and process attitudinally challenging arguments. To understand what the participants were doing with the increased time that they spent viewing confirming or disconfirming evidence, the authors analyzed the lists that were added in a second study (where participants could write their own thoughts about the arguments they read). The "sophistication" test measured political knowledge, with sophisticated participants being more knowledgeable about the issues in the content of the arguments they were given. Sophisticated participants produced many more thoughts and notes than their less knowledgeable peers. As hypothesized by the authors, incongruent arguments elicited far more thoughts and more skepticism than did congruent ones. These thoughts were almost entirely denigrating.

Of interest for our purposes, effects of confirmation and disconfirmation biases on attitude polarization and attitude strength were assessed—directly this time, through the development and testing of an attitude polarization scale and an attitude extremity scale. (For their high alphas, see Taber and Lodge [2006, 758].) Taber and Lodge hypothesized that biased responses to arguments "lead to attitude polarization because they deposit more supportive evidence and affect in memory"; in other words, "those on either side of the issues should become more attitudinally extreme in their positions" (2006, 765). This they found, and the strongest effects were among sophisticated, smart participants, and participants with strong prior commitments about the issues. These results were found across both the gun control and affirmative action conditions, and across the pro and con camps. For example, amongst participants who entered the study passionate about the value of affirmative action, those in this set who were most knowledgeable about affirmative action exited the condition in which they read arguments *against* affirmative action *more* convinced about its value than they were before reading the arguments.

One might object that the participants in the studies discussed above are not philosophers; so while inquiry in philosophy, like all inquiry, is no doubt affected by cognitive biases, the training philosophers receive prevents these biases from having any significant negative impact on the discipline. While we would like to believe that philosophers are special in this way, it is highly unlikely they are. As the studies above make clear, increased sophistication is correlated with increased bias. Granted, it is *possible* that bias would disappear if sophistication were increased beyond the levels that have thus far been tested or if specifically philosophical sophistication were tested, but the fact that philosophers above all others are capable of elaborate and ingenious *rationalization* strongly suggests otherwise. Further, although minimal data have been collected on bias specifically among philosophers (for one depressing exception, see Haslanger [2008], who confirms gender bias in philosophers), data have been collected about how bias has dramatic effects on the professional objectivity of scientists and other academics, in spite of their training (see, for example, Budden et al. [2008] and Steinpreis, Anders, and Ritzke [1999].) Further, keep in mind that this paper is ultimately concerned specifically with philosophers of religion, and in the next two sections we will show that bias is likely to be particularly damaging to inquiry in this area of philosophy because of the personal and coalitional religiosity of the vast majority of philosophers of religion and the impact of that religiosity on their emotions.

4. Affective Triggers

Emotions are at the root of the cognitive biases discussed in the previous section because they are shown to influence the processing of information, turning cognition from "cold" to "hot." In a detailed study of this connection researchers showed that arguments advocating a position opposed to one's preferred beliefs (about capital punishment) were "judged to be especially weak by people high in emotional conviction" (Edwards and Smith 1996, 16). Among participants evaluating an argument incompatible with their convictions, "those high in emotional conviction generated more refutational arguments than did those low in emotional conviction," a difference that was highly significant in the statistical sense ($p < .001$). This pattern was not observed for those with low

emotional conviction about the issue (1996, 17–18). Edwards and Smith conclude, "whether a person's prior belief is accompanied by emotional conviction affects the magnitude of the disconfirmation bias, as well as the form of this bias" (1996, 19). To those familiar with key functions of emotion in cognitive processes, this result is unsurprising (see Thagard 2005). Experiments show most concepts are attached to emotional attitudes (Fazio 2001). Emotions underlie our decision-making abilities and guide our actions (Lowenstein et al. 2001). Emotional centers of the brain like the amygdala are closely integrated with areas in the prefrontal cortex that process higher thought (Rolls 1999). Paul Thagard (2002) shows that scientific thinking itself is emotionally guided.

We have several reasons to think that similar results are sure to be found when the above experiments are replicated with arguments about religion, especially when using philosophers of religion as participants. First, *philosophers are emotional creatures* like other humans. Second, professional *philosophers of religion would score high on tests of sophistication about arguments in philosophy of religion* as opposed to control participants. Third, many religious *philosophers of religion, having committed their whole lives to a body of religious doctrine, have strong emotions about their religious beliefs*. The last two observations set religious philosophers of religion apart from other groups of philosophers—from, say, four-dimensionalist metaphysicians. As has just been reported, prior commitments associated with strong attitudes and emotions are strongly correlated in these and other studies with higher rates of cognitive bias and attitude polarization. Philosophers of religion occupy a unique place in philosophy. When a four-dimensionalist comes to give up that theory, she does not get fired from her job (as would most religious philosophers of religion at religious institutions were they to change their minds about theism). When a four-dimensionalist gives up his theory, he does not put his marriage in serious jeopardy (as would religious philosophers whose spouses believe that the truth of Christianity is the foundation of their marriage). Finally, the sort of emotional convictions that religious philosophers of religion have about things like God's existence or Jesus's forgiveness of sins obviously have no parallel in the case of four-dimensionalists.

Review of writings by philosophers of religion helps to confirm the influence of various cognitive biases. For example, many philosophers of

religion try to explain their high degree of confidence in their religious beliefs with the fact that they lack compelling arguments in support of those beliefs by suggesting that religious knowledge is possible without proof, indeed without any inferential evidence at all. An appeal to "sin" or even "original sin" and the variable damage it does to the cognitive faculties of human beings then functions to explain why not everyone shares their certainty. Such explanations seem quite incredible to nonbelievers. Since, however, these explanations employ pre-existing religious concepts and theological doctrines, it is not surprising that they appear plausible to some religious believers. What is surprising, however, is that a significant number of religious philosophers of religion actually assert with great confidence, not just the plausibility of these explanations, but their truth. It is difficult to explain such epistemic recklessness without postulating bias of some sort.

A second example concerns so-called "skeptical theists" who use axiological and modal skepticism to dismiss arguments from evil against theism. Such a response to the problem of evil is very popular among philosophers of religion, and it may have some merit. Anyone who thinks it does have merit, however, should either dismiss arguments in support of theism that appear to be relevantly similar or explain how skepticism about whether one should expect a God to prevent horrific evils can be reconciled with confidence that one should expect a God to produce goods like biological order, intelligence, free will, or sacred texts. Not all skeptical theists take the existence of goods like these to support their theism, but those who do seem mostly unaware of any tension in their views. Even more telling, one would think that philosophers of religion who use modal and axiological skepticism to challenge arguments from evil would worry at least a bit about the extraordinarily strong modal and axiological commitments of classical theism, yet so far as we know such worries are, in the case of the many skeptical theists who are also classical theists, almost nonexistent. All of this strongly suggests motivated skepticism, which is the tendency found in the Taber and Lodge study discussed above (see also Ditto and Lopez [1992]) to accept with little or no scrutiny evidence that supports one's prior beliefs while hypercritically evaluating and ultimately rejecting evidence contrary to those beliefs.

The arguments used by religious philosophers of religion to buffer antecedent religious belief from threat are, of course, much more sophis-

ticated and subtle than the arguments used by participants in psychological studies. And some of these arguments might be sound. But their connections to the results of psychological studies on bias in the face of counterevidence are far too suggestive for philosophers to continue to ignore. The data from cognitive psychology considered in this section and the preceding one, considered in tandem with techniques, positions, and arguments used in philosophy of religion, provide substantial confirming evidence for our diagnosis, namely that bias grounded in the emotions and operating mostly at the nonconscious level is responsible for philosophy of religion's poor health.

5. *Psychosocial Dimensions*

The coalitional features of religion provide additional confirming evidence. Like the ubiquity of cognitive biases, the power of group influence has been demonstrated by a variety of experiments. For example, Geoffrey Cohen (1993) conducted four studies confirming that political party membership influences a person's views about social policy even under conditions of "effortful processing." When participants considered two welfare policies and there was no association of those policies with any political party, liberal participants predictably favored the generous policy and conservatives favored the stringent policy. But when liberal participants were told that the harsh policy was favored by the Democratic party and conservative participants that the lavish policy was favored by the Republican party, "the persuasive impact of [each policy's] objective content was reduced to nil" (811): participants sided with their party, contrary to their ideological commitments, and this was true even for participants who were knowledgeable about welfare policy. Further, participants were *blind* to this group influence. They believed that their conclusions were based on the content of the policies, although they also believed that participants at the other end of the political spectrum would not be as objective in their assessment of the policies as they were.

This study and many others make it clear that group membership can create bias. What is less clear and thus what we will need to argue for in this section is that such influence is especially harmful to inquiry in philosophy of religion. Once again, emotion is the key. There are good reasons to believe that the emotional attachments that many religious philosophers have to their religious groups are exceptionally strong.

Further, we will argue that, given the nature of these attachments and their cognitive and behavioral effects, the specific symptoms of poor health identified in section one are to be expected.

We begin with the observation that the philosophical work of many religious philosophers of religion fits almost seamlessly into a larger "life of faith." This life includes, not just a set of religious beliefs, but also a number of social features, such as attendance at weekly religious events, feeling a sense of special belonging to one's church or mosque or temple (as opposed to other groups), communal affirmation of creedal statements, and self-identification as a member of an in-group of religious individuals. The defense of religious beliefs in the classroom, at conferences, or in professional writings is, for many Christian philosophers of religion, a small part of their religious life. They also attend weekly services; sing, pray, and testify to their faith regularly; are embedded in a social network of like-minded Christians; raise Christian children with a Christian spouse; and have Christian parents and in-laws. Among the group memberships a professional philosopher might have, few if any compete with religion for social, emotional, behavioral, and cognitive importance.

Recent multidisciplinary research on religion fleshes out this claim and provides further support for it. While there is disagreement about whether various components of religion are adaptations or evolutionary byproducts, it is widely agreed that religious commitments paid valuable dividends to religious people over the course of human history. Being part of a group with members who you can trust, who will share resources with you, with whom you are emotionally bonded, and who will punish others who attempt to harm you is incredibly advantageous. However, it requires otherwise selfish individuals to commit themselves to group interests and to trust others to do the same. Religious groups appear to be human culture's most effective means of motivating such prosocial bonds. Supernatural agents may play a crucial role in this regard because such agents are believed to have access to information that people ordinarily lack. As Scott Atran and Ara Norenzayan have suggested, this

> . . . creates the arational conditions for people to steadfastly commit to one another in a moral order that goes beyond apparent reason and self-conscious interest. In the limiting case, an omniscient and omnipotent agent (e.g., the supreme deity of the Abrahamic religions) can ultimately detect and punish cheaters, defectors, and free riders no matter how devious. (2004, 726)

One needn't, of course, accept this specific explanation to be convinced that the development of religion binds people together with thick emotional ties. That this is so is supported by a variety of studies on the benefits of being religious. For example, membership in a religious group as opposed to membership in a nonreligious group correlates with greater rates of in-group cooperation and lower rates of in-group free riding and in-group cheating (Sosis and Ruffle 2004; Schloss 2008). In addition, a fascinating set of experiments reveals a complex set of positive correlations between measures of religiosity and prosociality, including better anger management, empathy, and willingness to help (Saroglou, et al. 2005). Finally, religious priming correlates with honesty (Randolph-Seng and Nielsen 2007) and with prosocial behavioral schemata (Shariff, Norenzayan, and Henrich 2010; Pichon, Boccato, and Saroglou 2007). Thus, it is safe to conclude that religious individuals across the world and through history are bound more tightly together than the members of virtually any other sort of social group. If religious philosophers of religion have social and psychological tendencies at all similar to those found in religious people in general, then symptoms like excessive partisanship and narrowness of focus, and perhaps even the blurring of religious and philosophical criteria of evaluation, are to be expected.

Research by Lee Kirkpatrick links religious group membership to bias in a different way. Once again, emotions play a crucial role. When beliefs about supernatural agents arise, many other evolved systems of social cognition shape religious belief and its underlying emotional structure. The attachment system operates in Christianity, for example, by making Jesus, God, or Mary functional attachment figures and fictive kin. When gods or other supernatural entities become kin, affiliative emotions are catalyzed (Kirkpatrick 1998), coreligionists are drawn together in shared emotional experience, and gods are placed in leadership roles over the tribe or group (Kirkpatrick 2005). In theistic religions, religious forms of coping in response to negative life events appear prevalent and effective. Their effectiveness depends upon emotional experiences of God and beliefs in God's own love and affection for persons (Pargament 1997). For religious persons, including religious philosophers of religion, who are attached to God the Father and who have an emotional conviction that their Father loves them, reading an argument that their Father does not exist primes negative emotional responses (whether above or below levels

of conscious awareness). This threatens to swamp efforts at "cold" cognition and thus destabilize impartial consideration of counterevidence. This appears especially likely when individuals known to be out-group members present the counterevidence.

The undeniable benefits of being religious already discussed ought not be omitted from wider discussion of grand (or as we think, grandiose) verdicts on the net moral value of religion across time and place, if one is prone to that sort of thing. But these advantages appear matched by strong correlations with certain undesirable social and psychological features. In particular, statistically significant correlations have repeatedly been found between subjects who obtain higher scores on various scales of religiosity and negative attitudes about members of religious out-groups. Such negative attitudes include both aggression (e.g. Bushman, et al. 2007) and biases against outsiders (e.g., Hunsberger and Jackson 2005). The most robust prejudice correlated with religiosity is prejudice against atheists. In a study that one of us conducted with Jen Wright (2013), Christian and atheist actors were portrayed in one condition as performing identical immoral actions. Those actors portrayed as atheists were appraised significantly more negatively than those actors portrayed as Christians, and some subjects even doubted that the actors portrayed as Christians really believed in God. In another condition, atheist actors portrayed as performing supererogatory actions were regarded as less praiseworthy than their Christian counterparts performing identical actions. In light of work on the social and evolutionary psychology of religion, these and similar results, while depressing, are not surprising since atheists represent a universal out-group for religious people of all kinds. (The large preponderance of atheists in philosophy is worth considering in this connection.)

The sorts of out-group derogation correlated with coalitional religiosity and priming Christian concepts is enhanced and expressed through forms of interaction studied extensively by social psychologists. These include shared senses of history, interpersonal familiarity, collective rituals, frequency of social contact, corporate singing, costly signaling, and sharing a sacred text. In the Bushman et al. (2007) study cited above, authors used a clever design to determine whether significant differences in the increase in aggression would be found among participants who read a passage portraying violence by a religious mob against a religious out-

group. In one of the conditions of the study, half of the participants were told that the passage came from the Bible and half that it derived from an ancient scroll. Furthermore, in half of the texts the violence was described as sanctioned by God, and in the other half God was not mentioned. When God justifies violence in sacred texts, the passages led to significant increases in aggression for nonbelievers and especially believers (206). Sacred texts, but not nonsacred texts, have a pronounced effect on behavioral measures of aggression, especially among the religious.

The representation of out-group aggression and bias by religious texts is the subject of John Teehan's recent book, *In the Name of God: The Evolutionary Origins of Religious Ethics and Violence* (2010). In it he uses sacred texts of monotheistic traditions to argue that Abrahamic religious groups effectively modulated the emotions of in-group members in support of between-group violence. Some psychologists would insist that the social utility of a coalition like a religious group lies in binding members of the in-group together and separating the in-group from the out-group in order to enhance survival and procreation and to avoid threats. During the cultural history of our species, membership in a religious group afforded protection during rampant between-group competition, much of which was life threatening. Membership also required religious partisans to engage in aggressive violence against out-groups. In some cases God is portrayed as advocating religious war and even genocide. For example, in 1 Samuel 15:3, God Himself is quoted as saying to Samuel about the Amalekites, "Do not spare them; put to death men and women, children and infants, cattle and sheep, camels and donkeys."

Obviously Christian philosophers of religion do not have the sort of out-group antagonism that leads non-Christian philosophers of religion to fear for their lives, a point abundantly obvious to all. Religious philosophers are not at war with nonreligious or other-religious counterparts. And yet, arguably, residual effects of out-group aggression in the form of excessive polemics are present in their writings. Consider that Lakoff and Johnson, pioneering researchers of cognitive metaphor theory, argue that the Western notion of argumentation is reflected by "argument-as-war" (1980, 1–6). One argument *attacks*, another *defends*; a volley is *on target*. Though we leave to a quantitative analyst the important job of testing this claim against texts, we hypothesize that out-group polemics delivered

through war metaphors are less common in other areas of philosophy than in philosophy of religion.

In one of the few studies of war metaphors, Daniel Cohen argues that the Western *argument-as-war* metaphor is pedagogically ineffective, promotes cognitive bias and sacrifices the impartial pursuit of truth. Cohen concludes that this state of affairs ought to be amended in favor of a less adversarial construal of the goal and end of philosophical discourse (2004, 35–39). Robert Nozick's apt jocularity captures the silliness of philosophical combat: "Perhaps philosophers need arguments so powerful they set up reverberations in the brain: if the person refuses to accept the conclusion, he *dies.* How's that for a powerful argument?" (1981, 4–5). Unfortunately, given the research mentioned above on out-group aggression and bias, war metaphors (whether or not they are more frequent in philosophy of religion) are apt to take on greater meaning and emotional depth in, and be much harder to eliminate from, philosophy of religion. Who is likely to recognize a mistake or form the belief that an opponent's argument or objection is ultimately convincing if that involves conceding defeat at the hands of a spiritual enemy in what Plantinga has called a "battle for men's souls" (1991, 16)?

6. Complications

One complication of the disease under discussion is that many philosophers of religion are likely to be completely unaware that their discipline suffers from it (because the processes contributing to the disease typically operate at the nonconscious level). In fact, many will, predictably, continue to be unaware of this even after reading this paper because they will deny it (again, see Cohen 2003). We do not, however, want to use the old adage that "denial is not just a river in Egypt" as an ad hominem response to any attempt to challenge our diagnosis or the alleged evidence we offer in support of it. Accordingly, we devote this section on "complications" to addressing a few objections that complicate in some way either the issue of whether or not philosophy of religion really has the health problems we say it does or the issue of whether or not our hypothesis about the underlying causes of those problems is justified.

One objection is that, to the extent that philosophy makes progress, it does so only from a particular perspective. According to philosophers of religion in the Reformed tradition, all academic disciplines with the pos-

sible exception of the natural sciences are inherently perspectival (Wolterstorff 2010, 206–207). On this postmodern theory of the academy, what we called partisanship or narrowness of focus is arguably just objective inquiry *from a perspective* and so is normal, healthy, and inevitable. There is something right about this objection. There is no "view from nowhere" from which philosophy can be pursued. Even if philosophy is perspectival, however, surely the relevant "perspectives" are broad traditions of inquiry, not narrow sectarian religious (or antireligious) outlooks. Given how many such outlooks there are, to balkanize philosophy of religion in this way would be absurd. Ultimately, if such balkanization succeeded, what would be left would be a plethora of sectarian theologies and atheologies and religious philosophies. Philosophy of religion as a subdiscipline of academic philosophy would not survive.

Still, it might be objected, surely philosophical inquiry cannot be completely religiously neutral; for isn't all philosophy based on some broad religious or quasi-religious worldview? Brian Leftow (himself no Reformed thinker) says, for example, "Perhaps at some level, philosophy is *always* the theology of some ultimate concern. For philosophy is written in the service of a particular worldview and set of values" (1994, 195). In a similar vein, Plantinga claims, "There is no such thing as religiously neutral intellectual endeavor—or rather there is no such thing as serious, substantial and relatively complete intellectual endeavor that is religiously neutral" (1993, 56). The implication seems to be that, since there is no view from nowhere, one can only evaluate religious or nonreligious worldviews from the perspective of those worldviews. But this is manifestly false. Some traditions of inquiry, which are clearly not views from nowhere, are also not inextricably linked to specific religious traditions or even to broad religious or quasireligious worldviews. And this is a good thing. Otherwise worldview skeptics (like us) could not even do philosophy of religion.

Another objection is that "motivated cognition" is more likely to lead to original and sophisticated arguments than cognition that is less "passionate." Thus, even if it threatens the objectivity of philosophical inquiry about religion, it is not in the least bit unhealthy. The premise of this objection is false or at least there is no good reason to believe that it is true. Its apparent plausibility depends on the unsupported assumption that more effort will inevitably be devoted to passionate rationalization than to

the dispassionate pursuit of truth. More importantly, the conclusion of the objection does not follow from its premise because producing philosophically sophisticated arguments is not the only criterion of health in philosophy. Objectivity, though inevitably limited, is itself valuable, and one of the most important historical roles played by philosophy is to challenge cherished beliefs instead of providing sophisticated rationalizations for them. This is why the best philosophical inquiry is not risk-free and creates rather than just manages cognitive dissonance.

A third objection is that this paper is self-refuting, since, if it is right, then it follows that we shouldn't trust the arguments and positions in it because they are no doubt the result of cognitive bias on our part. This objection results from confusion about the implications of our diagnosis. From our hypothesis that philosophy of religion suffers from cognitive biases and group influence nothing follows about the truth or falsity of any particular philosophical position or about the soundness or unsoundness of any particular philosophical argument. Further, our paper is supported by distinct studies from more than one psychological science. These studies support the view that human beings are biased in the evaluation of counterevidence to their preferred beliefs, especially their preferred religious beliefs. Not all work in philosophy of religion involves the defense of preferred beliefs, let alone preferred religious beliefs. In our own case, we may very well have biases concerning religion, but this paper does not defend our religious beliefs. It defends certain claims about the effects of cognitive biases and group influence in our subfield. Of course, we may have antecedent beliefs about the existence of bias in philosophy of religion, but to establish bias in this paper one would have to show not only that these beliefs are preferred, but also that the bias they produce is so forceful that we haven't overcome it. Finally, lest anyone think that our focus on religious philosophers of religion is itself proof of bias, whether conscious or not, on our part, we would like to emphasize that we are not claiming in this paper that the work of nonreligious philosophers of religion is any healthier than the work of their religious counterparts. We simply lack sufficiently compelling data telling us whether or not this is so.

A final objection, one that has been repeatedly voiced to us, is that inquiry across the whole landscape of philosophy is just as biased as inquiry in philosophy of religion. Thus, bias cannot explain the symptoms

of poor health in philosophy of religion since those symptoms are not replicated in other equally biased areas of philosophy. We reject the premise of this objection, which is apparently based only on the "impression" of the objector. Worse, it just ignores our evidence, which is based on the numerous empirical studies discussed in the previous three sections of the paper. We won't repeat that evidence here. To appreciate its force, however, consider how philosophy of religion is unlike other subdisciplines of philosophy. In epistemology, for example, intelligent challenges to the truth of reliabilist theories of knowledge, while they may or may not be mildly unpleasant to reliabilists, typically do not trigger strong emotional reactions. Suppose the situation were different and leading cognitive scientists recently discovered that we have natural and normal propensities to form and tenaciously cling to beliefs in favor of reliabilism. Suppose further that commitments to reliabilism were suffused with powerful group loyalties and highly correlated with negative attitudes towards nonreliabilists. Finally, suppose that partisanship and polemics in reliabilist literature were excessive. We submit that it would only be reasonable for reliabilists to infer that they are subject to considerable bias and furthermore that they ought to better monitor their partiality as they consider evidence and counterevidence. Bias is no doubt a problem in all areas of philosophy, but given the large percentage of religious believers in philosophy of religion, the emotional depth of religious attachments, and the strong connection between bias and the emotions, there is good reason to believe that it is much more damaging to inquiry in philosophy of religion than to inquiry in most other areas of philosophy.

7. Prognosis and Treatment

It would be nice to have further confirmation of our diagnosis, especially testing by cognitive psychologists in order to establish how large a role nonconscious biases play in philosophy of religion and how this compares to other areas of philosophy and to other disciplines that study religion. Comparisons of bias between religious philosophers of religion and other philosophers of religion would, for the reasons suggested above, also be useful. (Helen De Cruz's as yet unpublished experimental and empirical research on philosophy of religion and its arguments represents a promising line of inquiry in this connection.) Such additional evidence, however, is not needed to make the correctness of our diagnosis probable.

So some discussion of how best to treat the disease of bias in contemporary philosophy of religion is warranted.

One thing that is clear is that attempts to pull the plug on philosophy of religion are misguided (and arguably themselves pathological). The *practical* importance of philosophy of religion, the intense interest of non-philosophers and students of philosophy in the subject, and the central role that topics in philosophy of religion play in the history of philosophy all strongly suggest that philosophy of religion is a vital part of the discipline of philosophy, worth saving even if heroic measures were needed. (For more on the significance of philosophy of religion, see Taliaferro [2010].) On the other hand, we do not believe that philosophy of religion can be cured, at least not completely. The underlying causes of the symptoms we identified are mental processes operating at a nonconscious level. No amount of conscious effort will eliminate them or the symptoms they produce completely. The goal, then, must be to control the disease and learn to live with it by minimizing its impact. How can this be achieved? A complete response to this question is beyond the scope of this paper, but we will close by making a few preliminary recommendations. These are directed specifically to philosophers of religion. (Our recommendation for others is simply to give the discipline the respect it deserves. Minimally, quit trying to marginalize philosophy of religion and if at all possible refrain from making foolish *generalizations* about the alleged low quality of the work philosophers of religion do.)

Our first recommendation is for philosophers of religion to distance themselves in every way possible from apologetics, whether theistic or atheistic. Neither of us is a demarcationist on most issues about the boundaries between philosophy and other disciplines, but apologetics is a special case. Apologists may make use of philosophy, but they serve a religious or secular community in a way that is antithetical to objective philosophical inquiry. Of course, there once was a time when philosophy was considered to be the handmaiden of theology. But that time is long since past, and it would be a mistake to try to turn the clocks back. Genuine philosophy today is superior to apologetics precisely because it does not face the "paradox of apologetics." Briefly, this paradox arises because apologists, unlike philosophers engaged in genuine inquiry, seek to justify their religious beliefs (as opposed to seeking to have beliefs that are justified). This implies that their inquiry, if it can be called that, is

inevitably biased, and biased inquiry cannot ground justification (unless of course conclusive evidence is discovered, but we know how often that happens in philosophy). Therefore, paradoxically, one cannot obtain justification for one's religious beliefs by seeking it directly. To obtain justification, one must directly seek, not justification, but truth.

Second, we recommend that philosophers of religion use argument construction less often as a method for making cases for the positions they hold, and more often as a method of testing those positions. This would require, of course, making a serious effort to construct good arguments against one's prior religious beliefs. Some will object that it is unrealistic to expect philosophers to conduct inquiry in this way, but what is the alternative? Given the powerful psychological forces at work here, can philosophers of religion simply leave the job of constructing opposing arguments to other philosophers and then expect to be able to accurately compare the strength of those arguments to the strength of their own? Exacerbating the problem at the group level is the fact that the vast majority of philosophers in the English-speaking world who specialize in philosophy of religion are theists—remarkably, just over 70 percent according to two recent studies (De Cruz 2012; Bourget and Chalmers 2009)—and almost all of those are Christian theists. Most religious perspectives are barely represented at all. Thus, a robust "adversarial system" in philosophy of religion does not exist.

To reinforce the importance of this second recommendation, consider a philosopher who spends a great deal of time trying to construct good arguments for God's existence and no time trying to construct good arguments against God's existence. Suppose also that this philosopher, when confronted with an argument against (or for) God's existence, spends a great deal of time trying to find flaws in that argument and no time trying to defend that argument against objections or trying to strengthen that argument by eliminating flaws. At the end of the day, this philosopher may sincerely believe that there are good arguments for (or against) God's existence and no good arguments against (or for) God's existence. If asked to justify this position, this philosopher may be able to say a great deal, all of it quite reasonable in and of itself. Is this philosopher's belief (or disbelief) in God then justified inferentially? Of course not. Given the method of investigation, philosophers like this one should have little or no confidence in the truth of their position.

A third recommendation is to make a conscious effort to allow, as J.L. Schellenberg puts it, the voice of authority to grow dim. All too often in philosophy of religion, viable arguments and positions never occur to thinkers because those thinkers are overly influenced by dominant, traditional forms of religion. This can occur even when a philosopher is not a believer in any traditional religion. For example, consider Schellenberg's widely discussed argument from divine hiddenness. A recent version of that argument proceeds as follows: (1) If there is a perfectly loving God, then all creatures capable of explicit and positively meaningful relationship with God who have not freely shut themselves off from God are in a position to participate in such relationships. (2) No one can be in a position to participate in such relationships without believing that God exists. (3) It is not the case that all creatures capable of explicit and positively meaningful relationship with God who have not freely shut themselves off from God believe that God exists. Therefore, (4) No perfectly loving God exists. Schellenberg complains that many philosophers fail to appreciate the plausibility of the argument's first premise because of the influence of authority and theology. He explains this point as follows:

> . . . it [is] easy for us to go along with the idea of a God who is more detached and aloof. . . [because] we have been influenced by the many attempts of theology to make God fit the actual world. Theology starts off by accepting that God exists and so *has* to make God fit the world: in a way, that is its job. But our job as philosophers, faced with the present topic, is to fight free from the distractions of local and historical contingency, to let the voice of authority grow dim in our ears, and to think for ourselves about what a truly *ultimate* reality that was fully *personal* and really was *perfectly loving* would be like. And I am suggesting that if we do so, a somewhat different picture of God from the one we are used to will emerge. (Schellenberg, 2007–2008)

Expanding on what Schellenberg says here about our reticence to accept the first premise of his argument, we are also influenced by authority when we too readily concede that his third premise is true. For that premise depends for its justification on the claim that human beings are capable of a positive and meaningful personal relationship with God. A moment's reflection, however, on the unimaginably large differences between the mind of a God and the minds of mere human beings reveals that this claim is far from obviously true. For many atheists, agnostics, and theists, the inclination to accept this premise results from the influence that Jewish,

Christian, and Muslim beliefs about God have on us and not on any good philosophical reasons for accepting it. Again, this shows how difficult it is to suppress the voice of authority, whether or not one believes that the authority in question is legitimate.

Finally, our fourth recommendation, which is the hardest of all to follow, is to make a conscious decision to accept genuine risk. True inquiry requires risk. This is why philosophical inquiry is aided by doubt. In experimental science, balanced inquiry is easier (though still far from easy) to achieve. Even if a scientist is sure of some cherished hypothesis, testing that hypothesis by experiment is (in many though admittedly not all cases) inherently risky. Apologetics by comparison is very safe insofar as pursuing it is very unlikely to result in the apologist rejecting any of the central doctrines of the religious community he or she serves. Philosophy should be riskier—the philosopher of religion must be prepared to abandon cherished beliefs. But with that risk comes greater opportunities for growth and discovery, and for freeing oneself from service to inflexible orthodoxy.

This point is nicely illustrated by the life and work of Rudolf Otto, who was raised an evangelical Lutheran and hoped initially that his university studies would provide him with the means of defending the conservative orthodoxy to which he was committed (Almond 1984, 11). This is not, however, what happened. Instead, Otto says, "The earth disappeared from under my feet. That was the result of my studies at Erlangen. I went there not so much to quest for truth, but more to vindicate belief. I left with the resolve to seek nothing but the truth, even at the risk of not finding it in Christ" (Almond 1984, 12). Although Otto remained throughout his career a theologian by title, he was an exemplary philosopher of religion in many ways. He is famous, of course, because he wrote one of the greatest works in the history of the philosophy of religion, namely, *The Idea of the Holy*. It is abundantly clear that, had Otto not rejected apologetics in favor of a more philosophical approach to religious inquiry, he would not and could not have written this masterpiece.

We realize, of course, that some philosophers who are sectarian theists might be unwilling to accept our recommendations. They might regard accepting them as in some way disloyal to their religious community or to their God. Yet in some sense such an attitude involves a lack of faith. If there really is a God and if such a God wants us to engage in

inquiry concerning ultimate reality, then surely such a God would want that inquiry to be balanced. Balanced inquiry is, as we pointed out earlier, risky. For this reason, it is arguable that a Christian philosopher who decides to follow our advice to imitate Otto must have greater faith, greater trust in God, than one who decides to follow the advice of Gary Deweese (et al. 2012, 7), author of *Doing Philosophy as a Christian* (2011):

> As Christian scholars we are of course free to entertain all manner of "what if" questions, some heterodox, some heretical. . . . While we're free to entertain such thoughts, I believe we are constrained by our faith to answer them in certain ways. If it seems to me that a particular claim is well-argued but it contradicts a significant tenet of the faith . . . , then I should seek to refute rather than defend it.

We also realize that cognitive bias in general, and especially the bias that infects philosophy of religion, are threats even when they are exposed and even when those who are biased consciously try to compensate for their bias. Following our recommendations is far from easy. It may be impossible for some. And the effectiveness of following those recommendations is, we admit, unproven. Still, we cannot emphasize enough just how important it is for philosophers of religions to heed our warnings. The future health of our discipline may very well depend on it.[1]

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Note

References

Almond, Philip C. 1984. *Rudolf Otto: An Introduction to His Philosophical Theology*, Chapel Hill, NC: University of North Carolina Press.

Atran, Scott and Ara Norenzayan 2004. "Religion's Evolutionary Landscape: Counterintuition, Commitment, Compassion, Communion," *Behavioral and Brain Sciences* 27: 713–70.

Bourget, David and David Chalmers 2009. "Correlations with: AOS:Philosophy of Religion," in *The PhilPapers Surveys*. http://philpapers.org/surves/linear_most_with.pl?A=profile%3AAOS%3APhilosophy%20of%20Religion

Budden, Amber E., Tom Tregenza, Lonnie W. Aarssen, Julia Koricheva, Roosa Leimu, and Christopher J. Lortie 2008. "Double-Blind Review Favours Increased Representation of Female Authors," *Trends in Ecology and Evolution* 23.1: 4–6.

Bushman, Brad J., Robert D. Ridge, Enny Das, Colin W. Key, and Gregory L. Busath 2007. "When God Sanctions Killing: Effect of Scriptural Violence on Aggression," *Psychological Science* 18: 204–207.

Cohen, Daniel 2004. *Arguments and Metaphors in Philosophy*, Latham, MD: University Press of America.

Cohen, Geoffrey L. 2003. "Party Over Policy: The Dominating Impact of Group Influence on Political Beliefs," *Journal of Personality and Social Psychology* 85.5: 808–22.

De Cruz, Helen 2012. "Confirmation Bias or Expertise? The Prevalence of Theism in Philosophy of Religion," http://prosblogion.ektopos.com/archives/2012/02/one-of-the-stri.html.

Deweese, Garrett J. 2011. *Doing Philosophy as a Christian*, Downers Grove, IL: InterVarsity Press.

Deweese, Gary and Joseph E. Gorra 2012. "Doing Philosophy as a Christian: Part One: A Multi-Part Interview between Gary DeWeese and Joseph E. Gorra," www.epsociety.org/userfiles/DeWeese_Doing_Philosophy_Interview.pdf.

Ditto, Peter H. and David F. Lopez 1992. "Motivated Skepticism: Use of Differential Decision Criteria for Preferred and Nonpreferred Conclusions," *Journal of Personality and Social Psychology* 63 (4): 568–84.

Edwards, Kari and Edward E. Smith 1996. "A Disconfirmation Bias in the Evaluation of Arguments," *Journal of Personality and Social Psychology* 71 (1): 5–24.

Fazio, Russell H. 2001. "On the Automatic Activation of Associated Evaluations: An Overview," *Cognition and Emotion* 15 (2): 115–41.

Gilovich, Thomas 1993. *How We Know What Isn't So: The Fallibility of Human Reason in Everyday Life*, New York: The Free Press.

Haslanger, Sally 2008. "Changing the Ideology and Culture of Philosophy: Not by Reason (Alone)," *Hypatia* 23 (2): 210–23.

Hathcoat, John and Laura Barnes 2010. "Explaining the Relationship among Fundamentalism and Authoritarianism: an Epistemic Connection," *The International Journal for the Psychology of Religion* 20: 73–84.

Hood, Ralph W., Peter C. Hill, and W. Paul Williamson 2005. *The Psychology of Religious Fundamentalism*, New York: The Guilford Press.

Hunsberger, Bruce and Lynne M. Jackson 2005. "Religion, Meaning, and Prejudice," *Journal of Social Issues* 61: 807–26.

Kirkpatrick, Lee A. 1998. "God as a Substitute Attachment Figure: A Longitudinal Study of Adult Attachment Style and Religious Change in College Students," *Personality and Social Psychology Bulletin* 24 (9): 961–73.

———. 2005. *Attachment, Evolution, and the Psychology of Religion*, New York: The Guilford Press.

Lakoff, George and Mark Johnson 1980. *Metaphors We Live By*, Chicago: University of Chicago Press.

Leftow, Brian 1994. "From Jerusalem to Athens," in *God and the Philosophers: The Reconciliation of Faith and Reason*, ed. Thomas V. Morris, Oxford: Oxford University Press, 189–207.

Lord, Charles G., Lee Ross, and Mark R. Lepper 1979. "Biased Assimilation and Attitude Polarization: The Effects of Prior Theories on Subsequently Considered Evidence," *Journal of Personality and Social Psychology* 37: 2098–109.

Loewenstein, George F., Elke U. Weber, Christopher K. Hsee, and Ned Welch 2001. "Risk as Feelings," *Psychological Bulletin* 127: 267–86.

Nickerson, Raymond S. 1998. "Confirmation Bias: A Ubiquitous Phenomenon in Many Guises," *Review of General Psychology* 2 (2): 175–220.

Nozick, Robert 1981. *Philosophical Explanations*, Cambridge, MA: Belknap Press.

Pargament, Kenneth I. 1997. *The Psychology of Religion and Coping: Theory, Research, Practice*, New York: The Guilford Press.

Pichon, Isabelle, Giulio Boccato, and Vassilis Saroglou 2007. "Nonconscious Influences of Religion on Prosociality: A Priming Study," *European Journal of Social Psychology* 37: 1032–45.

Plantinga, Alvin 1974. *God, Freedom, and Evil*, Grand Rapids, MI: Wm. B. Eerdmans Publishing Co.

———. 1984. "Advice to Christian Philosophers," *Faith and Philosophy* 1 (3): 253–71.

———. 1991. "When Faith and Reason Clash: Evolution and the Bible," *Christian Scholar's Review* 21: 8–33.

———. 1993. "A Christian Life Partly Lived," in *Philosophers Who Believe: The Spiritual Journeys of 11 Leading Thinkers*, ed. Kelly James Clark, Downer's Grove, IL: InterVarsity Press, 45–82.

Randolph-Seng, Brandon and Michael E. Nielsen 2007. "Honesty: One Effect of Primed Religious Representations," *International Journal for the Psychology of Religion* 17: 303–15.

Rolls, Edmund T. 1999. *The Brain and Emotion*, Oxford: Oxford University Press.

Ruse, Michael 1982. *Darwinism Defended*, Boston: Addison Wesley.

Saroglou, Vassilis, Isabelle Pichon, Laurence Trompette, Marijke Verschueren, and Rebecca Dernelle 2005. "Prosocial Behavior and Religion: New Evidence Based on Projective Measures and Peer Ratings," *Journal for the Scientific Study of Religion* 44 (3): 323–48.

Schellenberg, J.L. 2007. "What Divine Hiddenness Reveals, or How Weak Theistic Evidence is Strong Atheistic Proof," in *God or Blind Nature: Philosophers Debate the*

Evidence, ed. Paul Draper. www.infidels.org/library/modern/john_schellenberg/hidden.html.

Schloss, Jeffrey P. 2008. "He Who Laughs Best: Involuntary Religious Affect as a Solution to Recursive Cooperative Defection," in *The Evolution of Religion: Studies, Theories, & Critiques*, ed. Joseph Bulbulia, Richard Sosis, Erica Harris, Russell Genet, and Karen Wyman, Santa Margarita, CA: Collins Foundation Press, 197–207.

Shariff, Azim F., Ara Norenzayan, and Joseph Henrich 2010. "The Birth of High Gods," in *Evolution, Culture, and the Human Mind*, ed. Mark Schaller, Ara Norenzayan, Steven J. Heine, Toshio Yamagishi, and Tatsuya Kameda, New York: Psychology Press-Taylor and Francis, 119–36.

Sosis, Richard and Bradley J. Ruffle 2004. "Ideology, Religion, and the Evolution of Cooperation: Field Tests on Israeli Kibbutzim," *Research in Economic Anthropology* 23: 89–117.

Steinpreis, Rhea E., Katie A. Anders, and Dawn Ritzke 1999. "The Impact of Gender on the Review of the Curricula Vitae of Job Applicants and Tenure Candidates: A National Empirical Study," *Sex Roles* 41: 509–28.

Swinburne, Richard 2001. "Philosophical Theism," in *Philosophy of Religion in the 21st Century*, ed. D.Z. Phillips and Timothy Tessin, Basingstoke: Palgrave Macmillan, 3–20.

Taber, Charles S. and Milton Lodge 2006. "Motivated Skepticism in the Evaluation of Political Beliefs," *American Journal of Political Science* 50 (3): 755–69.

Taliaferro, Charles 2010. "Philosophy of Religion," *Stanford Encyclopedia of Philosophy*, plato.stanford.edu/entries/philosophy-religion/.

Teehan, John 2010. *In the Name of God: The Evolutionary Origins of Religious Ethics and Violence*, Malden, MA: Wiley-Blackwell.

Thagard, Paul 2002. "The Passionate Scientist: Emotion in Scientific Cognition," in *The Cognitive Basis of Science*, ed. Peter Carruthers, Stephen Stich, and Michael Siegal, Cambridge: Cambridge University Press, 235–50.

———. 2005. "The Emotional Coherence of Religion," *Journal of Cognition and Culture* 5:1–2, 58–74.

Van Inwagen, Peter 2006. *The Problem of Evil*, New York: Oxford University Press.

Wolterstorff, Nicholas 2010. "The Reformed Tradition," in *A Companion to Philosophy of Religion*, ed. Charles Taliaferro, Paul Draper, and Philip L. Quinn, Oxford: Wiley-Blackwell, 204–209.

Wright, Jennifer Cole and Ryan Nichols forthcoming. "How Perceived Religiosity Influences Moral Appraisal: The Social Cost of Atheism," *Journal of Cognition and Culture*.