

Reflective Pieces

with Arnold O. Benz, "Astrophysics and Creation: Perceiving the Universe through Science and Participation"; Whitley Kaufman, "Poetic Naturalism: Sean Carroll, Science, and Moral Objectivity"; and Doren Recker, "Faith, Belief, and the Compatibility of Religion and Science."

FAITH, BELIEF, AND THE COMPATIBILITY OF RELIGION AND SCIENCE

by Doren Recker

Abstract. Recent attacks on the compatibility of science and religion by the "militant modern atheists" (Jerry Coyne, Richard Dawkins, Daniel Dennett, Sam Harris, Christopher Hitchens) have posed serious challenges for anyone who supports the human importance of religious faith (particularly their identification of "faith" with "believing without evidence"). This article offers a critical analysis of their claims compared with those who do not equate faith with belief. I conclude that (i) the militant modern atheist interpretation of faith undervalues transformative religious experiences, (ii) that more people of faith hold it for this reason than their opponents acknowledge, and (iii) that meaningful dialogue between religion and science is both possible and desirable.

Keywords: belief; compatibility of science and religion; dialogue; evolution vs. creationism; experiential religion; faith; God hypothesis; militant modern atheists; spirituality; transformative experience

Is the relationship between religion and science a zero-sum game? Must we choose between them as competitive and mutually exclusive domains? As long as I've considered their relationship(s) and taught about this (in creation/evolution classes), I've supported their general compatibility. "General compatibility" means that they represent different areas of human concern that do not need to conflict with one another (as opposed to particular scientific and religious claims, which often do). I took religion to belong basically to value areas like aesthetics and ethics, while science deals with physical regularities and the empirical testing of causal claims.

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That doesn't mean that religion is purely emotive or disconnected from truth and reality claims, but that it isn't primarily concerned with explaining physical reality. *Genesis*, for example, isn't a science textbook, and the "truths" it contains are more like the truths expressed in poetry or painting—*human* truths—assessable in terms of how they provide guidance to or meaning for human lives, rather than in terms of experimentation or formal reasoning.¹ Generally, religious and scientific beliefs aren't of the same type, nor are they motivated or justified in the same ways.

Stephen Jay Gould made similar claims in 1999, opining that these two areas of human endeavor represented "non-overlapping-magisteria" (NOMA), each with its own appropriate realm of authority and both important for human flourishing. Essentially, science deals with factual issues while religion deals with values (Gould 1999, 5). While obviously being sympathetic to such claims, I had the same discomfort with this division of labor as did others on both sides of the creation/evolution debate. There are other areas of human endeavor besides religion dealing with values, and few religious people would surrender all factual (or "reality") claims to science. If I assert, for example, that Matisse was a better painter than Picasso (or *vice versa*), I intend to convey something beyond my own preferences—something I think I'm *right* about. I am saying something I take to be true, accurate or important about objects of art. While I would classify such a view as being value-laden (and not "setttable" in the way scientific claims are usually taken to be), it is not religious. Nor would my attempts to defend it look very much like scientific evidence (but nor would they look very much like emotional appeals). Again, the main problem with Gould's distinction was that it didn't sufficiently acknowledge reality claims on the part of religion and other value areas, and it didn't allow explicitly for value claims outside of religion (see also Ruse 2000, 81).

Creationists and intelligent design advocates argue that evolution and religion *do* make overlapping and conflicting claims about the world. Specifically, they hold that some form of direct, intelligent design provides a legitimate *scientific* explanation for (at least) detailed functional complexity in organisms and their components. Evolutionists (and scientists generally) argue that divine intervention is not a legitimate scientific explanation for any aspect of the physical world. *This* debate, then, is about properly understanding and explaining aspects of physical reality, and I am firmly on the side of evolutionists here. Science in general (and evolution in particular) has been remarkably successful in both explaining aspects of physical reality and providing compelling justifications for these explanations. But, I felt, as long as we defend scientific explanations against the improper invasion of untestable religious hypotheses, *and* defend human values from improper scientific intrusion, turf wars could effectively be marginalized. This was an overly optimistic view.

MILITANT MODERN ATHEISTS

Like their creationist opponents, “militant modern atheists”² (hereafter “militants”) take evolutionary biology and religious claims to be competing in the same arena—making and assessing claims about the physical universe. The battle, so conceived, concerns empirical evidence (or lack thereof) supporting (or failing to support) beliefs concerning these claims. Richard Dawkins’s phrase “the God hypothesis” reflects this interpretation, and the militants take this as a legitimate way to assess religious views—they are to be assessed as scientific claims and rejected if they fail *as* scientific hypotheses (Dawkins 2006, 2 and *passim*; Coyne 2015, 21–25). This directly leads to the assessment (shared by many of their opponents) that scientific (particularly evolutionary) and religious perspectives are incompatible, and rational decision-makers must choose between them in a zero-sum game (Harris 2005, 165–69, 271–72; Dawkins 2006, 54–61; Coyne 2015, Chap. 2).

Explaining the physical world is science’s bailiwick, and anything outside of this domain is also outside of the jurisdiction of science. If divine or other nonphysical agents are proposed as alternative explanations for the detailed functional complexity of organisms, for example, assessing and criticizing the God hypothesis from a scientific perspective is appropriate. But is this the best or most sophisticated notion of religious faith? And is the chief reason people maintain their faith because they are convinced that the God hypothesis provides a better explanation for physical phenomena than any scientific theory? These assertions are much more problematic. If they are false or misleading, the very notion of a God hypothesis akin to scientific hypotheses may reflect a reduced and myopic view of religious faith.

This reduction of religion to empirical truth claims is reinforced by the militants’ favored definition of faith—*believing without evidence*. Sam Harris, for example, maintains: “Every religion preaches the truth of propositions for which it has no evidence” (Harris 2005, 23). For Dawkins, “Faith is evil precisely because it requires no justification and brooks no argument” (Dawkins 2006, 308). Daniel Dennett appeals to a citation from Mark Twain: “It was the school-boy who said, ‘Faith is believing what you know ain’t so.’” Also, “Dawkins drew attention to what we might call *creedal athleticism*, the boast that my faith is so strong that I can mentally embrace a bigger paradox than you can” (Dennett 2006, 321, 229). More recently, Jerry Coyne elaborates on this evaluation.

Theologians intensely dislike the definition of faith as belief without—or in the face of—evidence, for that practice sounds irrational. But it surely is, as is any system that requires supporting *a priori* beliefs without good evidence. In religion, but not science, that kind of faith is seen as a virtue. (Coyne 2015, 67)

Believing without empirical evidence and creedal “athleticism” are scientific vices, and when such charges are leveled at religious faith and belief (justifiably or not), these are taken to be directly competing with science (but incompetently). Also, “evidence” is thereby construed in the manner in which scientific hypotheses and theories are adjudicated. As the militants plausibly assert, science possesses the ways and means to assess empirical truth claims. Religion, basing its pronouncements on faith (understood as believing without evidence) is hopelessly out matched in this contest and should retreat from the field of combat. It was one thing to ascribe thunderstorms to God’s wrath in the twelfth century, it is quite another to do so in lieu of modern meteorology. On this view, if God fails as a scientific hypothesis, religious faith merges with other outdated, superstitious, and irrational beliefs, and should quietly pass on.

Even an uneasy truce is to be discouraged, as religious beliefs aren’t simply quaint and misguided (to which the proper attitude might be polite and condescending silence). No, religion often leads to nasty, violent, and intolerant behavior on the part of its most fervent advocates. The militants, incensed as much by the events of 9/11/2001 as by the alleged epistemic follies of religious faith, cite litanies of horrors apparently motivated by creedal athleticism coupled with economic oppression and bigoted zealotry (Dawkins 2006, 286–98; Harris 2005, Chaps. 3–5; Hitchens 2007, 15–36; Dennett 2006, 328–39; Coyne 2015, 225–50). Crusades, pogroms, jihads, persecution of heresy, teaching children terrifying doctrines, willfully suppressing well-supported scientific theories in the name of faith, and so on, have throughout history increased the amount of ignorance and misery in our world. Isn’t it time to put a stop to all this?

And, contrary to common opinion, it is nonsense to think that beliefs are private and/or do not have social consequences. Echoing William Clifford’s claim that credulity is a social vice, Harris denies one has a “right” to his/her religious beliefs.

We can no longer ignore the fact that billions of our neighbors believe in the metaphysics of martyrdom, or in the literal truth of the book of Revelation, or any other fantastical notions that have lurked in the minds of the faithful for millennia—because our neighbors are now armed with chemical, biological, and nuclear weapons. (Harris 2005, 14)

Creedal athleticism is a team rather than an individual sport, and engaging in it often influences others negatively. With religion understood as discredited and irrational, *détente* is a vice rather than a virtue as it “is one of the principal forces driving us toward the abyss” (Harris 2005, 15).

So, when millennia of intolerance, bigotry, and horrors are added to the epistemic sin of believing without proper empirical evidence, the gloves must come off. But, aside from assessing the complex causes and determining blame for intolerance and cruelty in human history (Geertz 1999,

7–12; Spufford 2012, 12), is railing against religious faith as believing without evidence fair and accurate? This largely depends on whether items of religious faith are considered to be scientific hypotheses (or to be similarly engaged in providing explanations for physical phenomena). For creationists and intelligent design advocates, this is surely the case (though they wouldn't hold that this exhausts the importance of religion). And, insofar as this is so, scientifically criticizing the so-called "evidence" for their views seems apt. For many other people of faith (as well as those who sympathize with their position), however, this is a serious misrepresentation. Are the militant modern atheists correct in focusing on belief as do their creationist opponents? Is religious faith believing without evidence?

FAITH IS NOT (JUST) BELIEF

Many theologians and philosophers of religion balk at associating faith with believing without evidence, either because their faith isn't so closely associated with particular creedal beliefs as the above criticisms assume, or because the evidence they provide for their faith isn't of the same sort as scientific evidence (as with the Matisse/Picasso example). For the first alternative, the eighteenth-century theologian Friedrich Schleiermacher argued that those who associate religious faith with particular propositional beliefs don't understand true religion. Rather, "Religion's essence is neither thinking nor acting, but intuition and feeling" (Schleiermacher [1799] 2003, 22). As Eric Reitan explains, "There is a crucial difference, for Schleiermacher, between the feeling of piety and any attempt to explain it. He identifies religion with the feeling. As soon as you begin to explain it in conceptual terms you are doing *theology*, and you've left religion itself behind" (Reitan 2009, 20). The person of faith holds his or her faith *because* of experiences that make it compelling, not because of creedal beliefs.

As many have argued, the experiences relevant to religious faith seem to defy ordinary descriptive categories and to invite, instead, metaphorical and other nonliteral attempts to describe them (Harrison 2007; McGrath 2010, 105–08). This is due partly to the nature of religious objects, but also (more importantly for present purposes) to religious experience being *transformative*—changing one's life in terms of what is deemed possible and important, and making it difficult to communicate to those who have not been so transformed. Whatever else faith in something based on this sort of transforming experience may be, it is not grounded by the sort of evidence science evaluates. While such experiences may reinforce traditional beliefs or be understood in terms of these (more on this anon), they are not *based* on such beliefs, and are not themselves beliefs. *Having* the experience isn't clearly susceptible to external verification—except perhaps observed changes in *behavior* on the part of the subject. "I truly experienced something special, and it changed my life" seems capable of having some

sort of truth value (above and beyond any attempt to describe or explain the experience).

Dawkins deals with faith based on personal experience, and offers a quick response as well as a more sophisticated analysis. The quick response is: “You say you experienced God directly? Well, some people have experienced a pink elephant, but that probably doesn’t impress you” (Dawkins 2006, 88). The more sophisticated response appeals to a “hyperactive agency detection device” (HADD) (Barrett 2004, 32–44; Dawkins 2006, 89–91, 184). Our brains are apparently prone to attribute the presence of agency when cued by ambiguous stimuli (faces in clouds, rattling windows, indistinct shadows, etc.).

That is really all that needs to be said about personal “experiences” of gods or other religious phenomena. If you’ve had such an experience, you may well find yourself believing firmly that it was real. But don’t expect the rest of us to take your word for it, especially if we have the slightest familiarity with the brain and its powerful workings. (Dawkins 2006, 92)

Again, the emphasis is on scientific-type *evidence*—if your transformative experience isn’t verifiable by others, it doesn’t support belief (except possibly your own). Personal experiences and resultant beliefs are merely subjective musings articulated in pseudo-meaningful language. Then they’re protected by insisting that clearer and verifiable descriptions simply aren’t available. Believing anything on the basis of such experiences is (again) believing without evidence.

But the experience-based faith described above seems different. Consider the New Testament passage dealing with “doubting Thomas” (John 20:29). While the militants take this to be an iconic example, exhorting the faithful to believe without evidence, it needn’t be interpreted this way. C. S. Lewis (hardly a “new age” theologian), for example, reads it as follows:

The saying “Blessed are those that have not seen and have believed” has nothing to do with our original assent to the Christian propositions. It was not addressed to a philosopher enquiring whether God exists. . . . It is a rebuke not to skepticism in the philosophic sense but to the psychological quality of being “suspicious.” It says in effect, “You should have known me better.” (Lewis 1955, 537)

Trust is more important than evidence here—more like our interactions with persons than our attitudes toward propositions. And the idea that the experiences which ground religious faith are more like interpersonal relationships than subject-object experiences (I-thou/I-it) is fairly common among theologians and philosophers of religion (James [1897] 1956, 27–28; Kushner 1989, 40; Haught 2008, 45; Reitan 2009, 185–86; Spufford 2012, 62–63). Like experiences within interpersonal relationships, they do not tend to be evaluated in terms of scientific evidence but in terms of the quality of the experiences themselves.

Francis Spufford endorses such an experiential basis for faith, while still maintaining orthodox Christian beliefs.

I am a fairly orthodox Christian. Every Sunday I say and do my best to mean the whole of the creed, which *is* a series of propositions. . . . But it is still a mistake to suppose that it is assent to the propositions that makes you a believer. It is the feelings that are primary. I assent to the ideas because I have the feelings; I don't have the feelings because I've assented to the ideas. (Spufford 2012, 18)

This distinction is an important one. As claimed earlier, centering religious faith on special transformative experiences is different from that which is based on belief in a set of propositions. But, as Spufford indicates, that doesn't mean that advocates of the experiential interpretation don't also have beliefs, or that these beliefs aren't important to their faith. The crucial thing is what is taken to be the *ground*—what is based on what. If the ground for faith is transformative personal experiences, then it would be inappropriate to center on particular *beliefs* in trying to understand this faith. Finding out what someone believes need not be the same thing as plumbing the depths of his/her faith.

Philip Kitcher makes a distinction between the “belief model” of religious faith as opposed to the “orientation model” (Kitcher 2011, 3–4). This separates religious commitments based on propositional beliefs from those based on transformative experiences, meaning-providing aspirations, and so on. It also allows for motivations for and evaluations of faith to be independent of assessments of the narrowly empirical truth of particular creedal statements. I will henceforth refer to faith commitments grounded in special and transformative experiences as based on the Orientation Model, and those grounded instead on creedal beliefs as based on the Belief Model.³

So, it has been argued that there is an alternative to taking religious faith as offering an illegitimate alternative to scientific explanations and as susceptible to the same sorts of adjudication. Faith on the Orientation Model is closer to the value domain with which this article began, and not as obviously open to the criticisms of the militants as faith on the Belief Model. It is not primarily concerned with physical explanations, but instead based on transformative experiences, and isn't clearly susceptible to the charge of believing without evidence.

Another alternative to religious faith identified as believing without evidence is, again, the view that religious beliefs are of a different sort than scientific beliefs, and need to be adjudicated in different ways. On this view there can be evidences for religious beliefs that are quite different from the sort demanded by empirical science. I will call this the *domain-based evidence* view. Advocates of such a view, though often differing in other respects, reject accusations of religious irrationality based on conflation

of religious and scientific evidence. For present purposes we may gloss this general view as a denial that scientific standards are appropriate for assessing all beliefs—that the realm of legitimate beliefs transcends the proper domain of science.

This is neither incompatible with nor identical to faith understood in terms of the Orientation Model. Reitan, for example, an advocate of the Schleiermachian experiential approach discussed above, rejects scientific challenges to religious faith as follows;

Theologians and philosophers of religion should not be forced, out of deference to those scientists who want to subject everything to *their* methodology, to adopt a definition of God unsuitable to its subject matter. (Reitan 2009, 45)

He bases this on the militants' crude understanding of religious belief based on the God hypothesis, and on the view that religious language is inherently nonliteral and metaphorical, and hence not verifiable in a scientific manner (Reitan 2009, 35–46).⁴ This is only one version of the domain-based evidence position, and others wouldn't necessarily stress the primacy of religious experience. But, like the differences in assessing claims between science and value domains with which we began, the important point is that beliefs (and truth and reality claims) in different domains needn't be adjudicated in the same manner.

Militants and their allies deny alternatives to scientifically construed evidence. Coyne, for example, makes the following strong claim:

(T)he claim that religion and science are complementary “ways of knowing” gives unwarranted credibility to faith. . . . Science and religion . . . are competitors in the business of finding out what is true about the universe. In this goal religion has failed miserably, for its tools for discerning “truth” are useless. (Coyne 2015, xvi)

That is, science has developed reliable techniques for discovering and assessing “what is true about the universe,” and religion has steadily lost ground because its techniques turn out to be “useless” for this purpose. Again, however, there seem to be other purposes and other sorts of assessment in different domains of human life. Unless one supports the view that my earlier claim about Matisse and Picasso can and should be assessed in the same manner as, for example, DNA being the genetic material, taking appropriate evidence to be domain-based seems to be tenable. So, whether religious faith (or any other value area) constitutes believing without evidence should be decided independently of *scientific* assessments of evidence. There seem to be different sorts of belief as well as different sorts of justification—each domain-dependent—which may or may not overlap in particular cases.

BELIEF IS CENTRAL TO MOST PEOPLE OF FAITH

There are at least two sorts of responses open to militants about these claims above and beyond Dawkins's denial of intersubjective verifiability. One response is conceptual and based on the same distinction between experience and interpretation championed earlier—there can be a huge difference between having an important experience and what is said about it. Even if the first isn't easily accessible to the belief-without-evidence gambit, the second may well be. The other response is practical. Even if liberal theologians and philosophers can pry religious faith from belief statements that are flagrantly inconsistent with well-established scientific positions, this is not the faith of most believers. So attacks on belief without evidence may still hold for most people of faith.

For example, Sam Harris takes transformative experiences *very* seriously, has had them himself, and acknowledges the reality of spirituality as well as the human need for it. Still, as we've seen, he's as vehement as any militant as far as the illegitimacy of religious faith is concerned.

There is no denying that most of us have emotional and spiritual needs that are now addressed—however obliquely and at a terrible price—by mainstream religion. And these are needs that a mere *understanding* of our world, scientific or otherwise, will never fulfill. There is clearly a sacred dimension to our existence, and coming to terms with it could well be the highest purpose of human life (Harris 2005, 16; see also Harris 2014, 8)

Here we have both an acknowledgement of transformative experiences and a separation of different domains of human endeavor (scientific understanding isn't everything). Isn't that all the above two defenses of religious faith against the believing-without-evidence charge require? No. Harris's claim here doesn't negate (for him) his primary complaints about religion. Like other militants he still scorns what he thinks *most* people of faith believe, and is not concerned with the fine-tuned distinctions of a few liberal theologians and philosophers of religion.

My argument after all, is aimed at the majority of the faithful in every religious tradition. . . . Despite the considerable exertion of men like Tillich . . . , the truth is that religious faith is simply *unjustified* belief in matters of ultimate concern. (Harris 2005, 65)

So, the beliefs surrounding religious faith, even on the Orientation Model, are still mired in unjustifiable assertions. And even where matters of ultimate concern transcend scientific understanding and point to different domains of human endeavor, this is not legitimately extended to the creedal beliefs of most people.

Acknowledging that many liberal academics stress the Orientation Model or domain-based evidence views of belief and justification, Coyne, too, brings us back to the Belief Model. "How many Christians would

remain Christian,” he asks, “were they to know for sure that Christ was neither divine nor resurrected . . . ?” (and similarly, of course for Jews, Muslims, etc.—Coyne 2015, 62). That is, even if Spufford and others are right about the centrality of emotional transformative experience to their faith, and even if Reitan is right in refusing to allow the meaning and justification of religious beliefs to be adjudicated by science, would most people of faith accept a peace treaty with science if they were convinced that their central religious beliefs were scientifically falsified? If their faith is Bible-based, for example, and they think the Bible is inerrant and its stories are literally true, can they retain their faith without rejecting scientific claims concerning the age of the earth, the occurrence of a universal flood, and so on?

Coyne (like other militants) provides data seeming to support the predominance of belief-based faith (Coyne 2015, 51–53; Harris 2005, 17). The most depressing statistic for those sympathetic to compatibility is the following:

When asked what they would do if science showed that one of their religious beliefs was wrong, nearly two-thirds of the respondents—64 percent—said they’d reject the findings of science in favor of their faith. Only 23 percent would consider changing their belief. (Coyne 2015, 10).

This not only seems to support the charge of believing without evidence—refusing to accept scientific evidence against dogmatically held beliefs—it also directly pits science against religious faith. So, whatever may be the case for elite theologians and philosophers of religion, there is no *détente* between religion and science for most religious people (at least American Christians)—the incompatibility claim of the militants seems vindicated.

Even in substantially less religious England, Julian Baggini was “astounded at the literalism” of those who answered a questionnaire he administered to churchgoers in 2011 (Baggini 2011; Coyne 2015, 51–52). Eighty-six percent of those polled, for example, agreed or tended to agree that Jesus performed miracles, and 41% joined their American counterparts by agreeing (or tending to) that if science contradicted the Bible they’d believe the latter. Baggini interprets his results as indicating that liberal academics who deny that religious faith is based primarily on belief

are advocating a view about how religion ought to be in its best form which doesn’t describe the reality on the ground. They are defending an ideal of religion, a possibility that is not the normal actuality. . . . Therefore when responding to atheist criticisms, the accusation cannot be that they misrepresent religion. (Baggini 2011, 3)

Do such polls, which have provided similar results for decades, strongly support the militants’ contentions? Do they justify claiming that neither

the Orientation Model nor the domain-based evidence view can mitigate the charge of believing without evidence—at least for most of the faithful?

FAITH IS NOT (JUST) BELIEF: ROUND TWO

So, we're confronted with two challenges to denying that faith is primarily believing without evidence. First, even if experience-based religion isn't *based* on doctrinal beliefs which are not verifiable (or even supportable) in a scientific sense, such beliefs are still heavily associated with religious faith, especially for nonacademics. Second, even if "evidence," "truth" and such have different interpretations and justifications in a religious than in a scientific context, this holds mostly for liberal theologians and philosophers of religion, not for the bulk of the faithful. Bible-believers don't tend to fool around with literal meanings of important terms.

Kitcher introduced a distinction which may help us sort through the first problem. He calls those whose faith is based on the Orientation Model but who also have beliefs which imply the existence of transcendent beings (or who *interpret* their experiences or value orientations in terms of doctrinal claims) "doctrinally entangled." This holds if these additional beliefs are taken to be inspirational *because* what is appealed to exemplifies fundamental values, enhances the possibility of realizing them, or provides a way of understanding transformative experiences (Kitcher 2011, 5; Reitan 2009, 49–50). Doctrinal entanglement means that matters of ultimate concern based on direct transformative experience or upon deep value commitments are not infrequently inspired by or interpreted in terms of historical religious doctrines. So, people with entangled beliefs may recite the Nicene Creed, attend services, and see their life as taking on meaning in fairly traditional religious ways. But their experiences and life-goals support their doctrinal commitments, rather than *vice versa*. And many of those who support faith on the Orientation Model (and/or who take their religious beliefs to be justified in a different manner than scientific beliefs) are not as certain of their particular creedal commitments as fundamentalists, and continue both to be open to alternate interpretations and to making their beliefs consistent with established scientific truths (Reitan 2009, 182–84; Spufford 2012, 8–9; Kenneth R. Miller 1999, 225–32; 2007, 161–62). Again, though, how widely such an entangled perspective is spread among people of faith is another matter.

A few weeks ago the local newspaper ran a report on a woman who had been a drug dealer, who, while in prison, turned her life around with the help of volunteers from a faith-based group. Now she operates halfway houses for women in similar predicaments, and attributes her rebound to the grace of God. Her life and habits are certainly different than they were, and she found the strength to make these changes by feeling unconditional love for the first time in her life. And both she and her faith-based

supporters attribute that capacity to love to the grace of God (see also Reitan 2009, 183–84; Spufford 2012, 18–20). Bible reading, faith-based discussions, and so on, help articulate her new lease on life, and the joy, hope, and confidence she feels are apparent to everyone around her. The transformative experiences, the strong emotions, the new behavior patterns and self-confidence, all seem to have an aura of truth about them—no one suspects that any of this is a fraud. And, such experiences have been reported all over the world, and attributed to all sorts of religions.

Could such experiences and life changes take place without the associated metaphysics? Of course. There are transformative experiences and positive changes in people's lives that are not interpreted in terms of traditional religious doctrines. Sam Harris has had such experiences, and so have many others who do not interpret them religiously. So, the transformative experiences do not provide (scientific) evidence for the associated beliefs—the experiences can be interpreted differently, and other explanations can be given for them. Even among religious believers, there is a wide range of confidence in the doctrinal claims they use to interpret and express the core of their new lives. Spufford represents one side of this range.

No, I can't prove it. I don't know that any of it is true. I don't know if there's a God (and neither do you, and neither does Professor Dawkins, and neither does anybody). It isn't the kind of thing you can know. . . . Emotions can certainly be misleading: they can fool you into believing stuff that is definitely, demonstrably untrue. But emotions are also our indispensable tool for navigating, for feeling our way through, the much larger domain of stuff that isn't susceptible to proof or disproof, that isn't checkable against the physical universe. (Spufford 2012, 21)

Above and beyond their status as checkable claims about the physical universe, whether or not the entangled beliefs are justified in *any* sense depends largely on the role the interpretations play in a person's life. As always on the Orientation Model, it is this role that is important—the experiences ground the beliefs, the beliefs don't ground the experiences.

Doctrinal entanglement is a tricky business and cannot be assessed in a one-size-fits-all manner. The interpretation of transformative experiences and confidence in them by the reformed drug dealer is likely very different from Spufford's. Do the polls cited by the militants indicate that she and most other people of faith (perhaps *unlike* Spufford) are guilty of believing without evidence? Not unambiguously. Take Baggini's poll results, for example. Yes, 86% believe Jesus performed miracles. But when asked to assess "What I believe matters more for my Christian faith than how I live," 83% answered that the two were "*equally important*" (Baggini 2011, emphasis added). And even attending church "to worship God" isn't inconsistent with transformative experiences being the basis for faith, nor with justification for this worship being other than scientific-type evidence.

So, Baggin's study does not provide unambiguous support for the Belief Model among English churchgoers.

If we're arguing about whether faith is belief without evidence, *motivations* for beliefs are crucially important, as is the overall role the beliefs play within their appropriate domain. Entangled beliefs are almost impossible to assess without knowing the effects of the transformative experiences on a person's life and how he/she interprets and utilizes the accompanying beliefs. Responses to questionnaires do not tease out these motivations, nor do they elucidate the role of the beliefs in a person's life. And there are reasons to think that the Orientation Model is more prevalent in the faith of many people than is often recognized.

According to a 2015 Pew report, Evangelical Christians represent the largest group of Protestant Christians in the United States, and have steadily risen in numbers since 2007 (Pew Research Center 2015, 3–4, 9). And this group, despite differences among denominations and between these and nondenominational congregations, takes the Bible *very* seriously (Donald E. Miller 1997, 12–13; Luhrmann 2012, 15). As self-professed “Bible-believers,” they would seem to support the claim that the Belief Model grounds faith for a vast majority of believers.

But that would be a hasty generalization. Many of these rapidly expanding evangelical congregations are nondenominational and associated with what sociologist Donald Miller calls “new paradigm” churches (1997, 1–2). One of the main differences between these churches and traditional Protestantism is that they espouse an Orientation Model. As Miller observes:

I had wrongly assumed that the mainline Protestant denominations were losing members because of the dissonance between their faith and the culture. Now I realized that part of the problem was the focus on rationalized beliefs. . . . My exposure to these rapidly growing churches taught me that religion is more than assent to well-formulated beliefs. (Miller 1997, 8)

While the Bible is very important to these groups, transformative experience seems more important than creedal beliefs (Donald E. 1997, 23). The importance of religion in their lives depends on the promise of hope and a reason for being, and new paradigm churches have found more effective ways of delivering these for many people than traditional Christian churches. What is explicitly sought (and often found) by congregants is a personal relationship with God. This experience grounds their faith, and trust in this *person*, rather than assent to particular creedal propositions, sustains it (Donald E. 1997, 27, 77, 86–87).

Though Scripture is stressed and its truth assumed, in evangelical tracts we are often encouraged to take a more emotional and experiential approach to God's word, and this is

intended to free us to love God and others with our whole heart. When we ignore this aspect of our faith and try to live out our religion solely as correct doctrine or ethics, our passion is crippled, or perverted, and the divorce of our soul from the heart purposes of God toward us is deepened. (Curtis and Eldredge 1997, 8)

Elsewhere we are encouraged to approach scripture as we would a novel (without taking it to be fictional), because stories are the language of the heart, and we consequently become more emotionally and experientially involved (Curtis and Eldredge 1997, 39–40, 45). The more people experientially process the stories, the more these come to life (as opposed to representing mere true/false statements), the better.

In new paradigm churches, what many congregants get from the Bible is what others get from novels—“a sense of how to live in the world” (Luhrmann 2012, 58). One congregant explained how God communicates to the avid biblical reader: “a verse just jumps out at me,” and “you feel peace, or intense joy, or suddenly you feel very tired, as if a burden has been lifted and now you can sleep” (Luhrmann 2012, 59). Clearly there are beliefs entangled with these intense experiences, but the experiences ground the beliefs. And this sort of faith is closer to reactions to art, poetry, music, and interpersonal relationships—again, *human* truths—than to propositional truths. That doesn’t mean that these people hold the same doctrines as liberal academics, but there are enough similarities to throw the hegemony of the Belief Model into question.

This is reinforced by T. M. Luhrmann, who has conducted long-term participant observation studies within congregations of new paradigm churches.

Two-thirds of the generation we call the “baby boomers” stopped going to churches and temples as adults. Half of them have now returned to religious practice, but not to the mainstream, hour-long services of their childhood. They have joined churches, temples, and odd little groups that put intense and personal spiritual experience at the center of what it is to believe in the divine. (Luhrmann 2005, 140)

While the people with whom she attended Bible study groups certainly took the Bible to be literally God’s word, they read and interpreted it as if it had been written specifically for them individually, rather than as expressing a creed (Luhrmann 2012, 23). They were not interested in theological or orthodox interpretations, but tried to understand the text as having meaning for their lives. Only once did a congregant attempt to correct Luhrmann’s (or anyone else’s) take on a Biblical passage, and the rest of the study group were amused. They simply didn’t worry about heresy and correct belief. “They worried about making God come alive for them” (Luhrmann 2012, 92). As another of the congregants assured her, “Words, words, words. It’s the relationship that counts” (Luhrmann 2012,

92). Luhrmann began to see the congregants' committed belief in God as "more like learning *to do* something than to *think* something" (Luhrmann 2012, xxi).

In light of this, would they surrender their entangled beliefs in the face of overwhelming scientific evidence? Probably not. But instead of interpreting this as the militants do—as stubborn maintenance of empirical beliefs in the face of scientific refutation—we should consider other possibilities. First, many of the entangled beliefs are not strictly empirical claims, and so not easily refutable by science. Attributing the experience of unconditional love to God, for example, isn't incompatible with a scientific explanation for the feeling based on neurotransmitters—no more than being emotionally overwhelmed by the beauty of a painting or sonata is incompatible with physical investigations via sound waves and light rays. Second, what is being maintained in the face of scientific argumentation is likely either the *experiences* and their meaning for the individual, or the overall religious lifestyle which sustains and provides meaning for the believers' lives—providing a different sort of justification for the associated beliefs than experimentation or formal reasoning. Maintaining the coherence of such life domains can make good emotional sense, even when not supportable by scientific evidence (Spufford 2012, xii, 20–21).

So even many Bible-believing Christians may share the sort of emphasis on transformative experiences and/or domain-based evidence as do academic authors. What percentage of Christians (or even of American Evangelicals) would ascribe to this is difficult to determine (again doctrinally entangled orientations are hard to tease out). But, there is some evidence that at least the fastest growing congregations have a large number of congregants whose faith is based on the Orientation Model, and who are not primarily concerned in their religious life with scientifically confirming their associated beliefs. Having entangled beliefs doesn't necessarily put one at odds with scientific claims, and doesn't mean the associated beliefs aren't modifiable. If the transformative experiences and overall value orientations aren't challenged, meaningful dialogue may well be possible.

CONCLUSION: THERE'S BELIEF AND THEN THERE'S BELIEF

I've argued that there are at least two responses to the militant's claim that religious faith is or essentially involves believing without evidence. One (based on the Orientation Model) stresses transformative experiences and important positive life changes as the ground for faith, undermining the militant's identification of faith with particular beliefs. Beliefs may be entangled with the underlying experiences and maintained because of the felt association with these experiences, but they are not the essence of religious faith. The other response is related, but broader in scope. Here we return to the science/value distinction with which we began,

refusing to reduce notions such as “truth” and “evidence” to scientifically adjudicated cases (the domain-based evidence view). Believing without *scientific* evidence isn’t the same as believing without evidence. Finally, I’ve argued that assuming the faith of most believers *is* based on the Belief Model (often as a result of poll results) is also problematic—there may be much more support for the Orientation Model than the militants (and many others) suppose. In conclusion, I’d like briefly to clarify and reinforce these claims.

To understand the experiences of people whose faith is based on the Orientation Model requires a sympathetic, participant observation approach which tries to unpack the meaning of the events as the participants understand them. That’s why polling results and questionnaires don’t adequately reveal what’s going on as far as the Orientation Model is concerned. Near the end of her book on new paradigm churches, Luhrmann claims that, while she wouldn’t call herself a Christian, she did, while praying, worshipping and talking with congregants, experience “what I believe the Gospels mean by joy.”

I watched people cry in services, and eventually I would cry in services too, and it seemed to me that I cried the way I sometimes wink back tears at children’s books, at the promise of simple joy in a messy world. I began to pray regularly, under the tutelage of a spiritual director, and I began to understand parts of the church teaching not just as so many intellectual doctrinal commitments but as having an emotional logic of their own. (Luhrmann 2012, 325)

Simply asking congregants what they believe or analyzing texts or testimony they deem religiously important misses what is the most important factor according to the Orientation Model—what the faith feels like and what it means in the lives of the faithful.

And when sacred texts begin to have “an emotional logic of their own,” determining reasons for believing them (“evidence”), what this belief amounts to, and how it affects someone’s life and behavior is rather different from analyzing scientific claims. Different sorts of reasons are provided and the beliefs are assessed differently than interpreting them as if they were discursive texts. That is part of what I have in mind with “domain-based evidence.” One needn’t fully accept the domain to be able to understand the motivations of those who do, but cold analysis seems as inappropriate for these purposes as for appreciating music or a poem—something important is missed by not trying to enter the domain imaginatively, even if only as a sympathetic “visitor.” I called these “human truths” at the beginning of this article, indicating that we assess them differently than we do scientific or legal truths. Another way to put this would be to say that there are contexts in which *understanding* human beliefs and behavior is not the same thing as (scientifically) *explaining* them (Gregory 2006).

Again, the charge of believing without evidence assumes a univocal notion of evidence (scientific), and a narrow understanding of “belief” as a positive cognitive attitude towards a set of propositions. This is currently the predominant understanding of “belief,” but this has not been true historically, especially (but not exclusively) concerning *religious* belief (Smith [1977] 1998; 1979). Nor does this notion of belief capture the religious experience of many people of faith. As D. Z. Phillips claims:

To say “I believe in God” is to make a confession. Believing is called a virtue, and failing to believe a sin. Believing is something capable of growth, and this growth is said to be the increasing presence of God in one’s life. (Phillips 1993, 102)

One can, of course, disagree with such notions. But the militants in their criticisms of faith as believing without evidence don’t acknowledge that they might reflect the actual religious lives of many people. The charge of believing without evidence is aimed instead at the attitude-toward-a-proposition sort of belief.

But if insisting that a one-size-fits-all notion of evidence sins against domain-based differences, so does claiming that faith-based claims constitute science. The militants aren’t wrong about the inappropriate assertions from so-called scientific creationists and intelligent design advocates concerning what should be taught in public schools. It is when their analyses are extended to *all* faith-based claims that their position is shakier. That is where methodological naturalism turns into imperialistic naturalism—just as metaphysical and inappropriate in the public schools as creationism (Ruse 1996, 516–17; Ruse 2003; Gregory 2008).

Why should we find the above approach amenable to dialogue and compatibility between science and religion? Because humans *need* both life-goals and overall meaning in their lives on the one hand, and empirically adequate views about how the physical world works on the other. That means that we can all benefit from discussions concerning and examples of deep human values as well as from education in physical science. This isn’t a one-way conversation, and value- or science-based perspectives should be favored when their appropriate domains are at the forefront—when we need or desire to consider one or the other. The militants don’t deny the importance of values and meaning in human life. Dawkins rhapsodizes about the beauty of nature and our ability to wonder at it (Dawkins 1998, 3–6, 311–13), Harris has had transformative experiences and preaches the importance of spirituality (Harris 2014, 1–7), and Coyne acknowledges the emotional importance and satisfaction derivable from the arts (Coyne 2015, 190–96). They also claim, however, that those who find meaning and human values in religion are wasting their time, being duped, and so on.

But the ways in which these academics have found value and meaning aren’t easily accessible to billions of people worldwide (or the approximately

one-third of them who are Christian), but many of these people *do* find solace, hope, and meaning in their religious lives.

As Kitcher has poignantly asserted, attacking religious faith without viable replacement is asking people to sell their birthright for a mess of pottage (Kitcher 2007, 118–20, 154–66). Religion isn't the only significant purveyor of values and *human* truths, but is an historically important one, and, as such and insofar as it is understood this way, continues to deserve sympathetic respect. And, from the perspective of the Orientation Model or the domain-based evidence approach, it isn't clear that science has, in fact, refuted religious hopes and dreams. This, again, could only occur if science and religion directly compete in the same arena (sometimes they do, often they don't). I've argued that for many people of faith, they may not have to—what grounds their faith is *not* primarily beliefs about the empirical world.

It has been noted that “Darwinism doesn't provide much consolation at a funeral” (Kitcher 2007, 155). That rings true to me. It is equally true that taking the Bible (or any sacred text) as literally true and in competition with scientific theories concerning the physical universe doesn't provide a very good basis for empirical knowledge. So, good fences *do* make good neighbors, and there are important reasons to maintain these fences. That doesn't mean, however, that we shouldn't encourage gates in the fences through which neighbors can converse (and sometimes cross). We share a need for meaning and purpose in our lives *and* for good scientific theories and shouldn't have to choose between these needs. Life is not a zero-sum game between values and empirical evidence, or between (some) religious faith and science.

NOTES

1. Philip Kitcher (2014) offers an interesting version of “weak” and “strong” truths *within* different language games, and distrusts using “truth” too loosely in these contexts. I agree, but truth is by far the most familiar concept here, and I only use it to express what-is-taken-to-be-the-case in different domains.
2. This is the title of an article by Kitcher (2011) concerning recent advocates of the incompatibility of religion and science, especially Richard Dawkins and Daniel Dennett.
3. My emphasis on religious experience is different than Kitcher's on value orientation. I use his terminology because it is apt and was an important inspiration. I have used initial capital letters to distinguish my extensions.
4. This is not to say scientific language is metaphor-free—far from it! (Ruse 2013, 52–56, 67–95; 2015, 36 ff.) But Reitan is simply denying that all justifications for beliefs involve scientifically construed empirical evidence.

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