

Why Religion Is Natural and Science Is Not: A Conversation with Robert McCauley

with James A. Van Slyke, "Religion Is Easy, but Science Is Hard . . . Understanding McCauley's Thesis"; Andrew Ali Aghapour, "Defining 'Religion' as Natural: A Critical Invitation to Robert McCauley"; Gregory R. Peterson, "On McCauley's Why Religion Is Natural and Science Is Not: Some Further Observations"; and Robert N. McCauley, "Explanatory Modesty."

EXPLANATORY MODESTY

by Robert N. McCauley

Abstract. Although I certainly have differences with some of my commentators, I am grateful for the time, effort, and attention that each has devoted to my book, *Why Religion Is Natural and Science Is Not*. They have helpfully pointed out features of my positions that need clarification and elaboration. I am also grateful to the editor of *Zygon*, Willem Drees, for this opportunity to undertake that task here.

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Although I certainly have differences with some of my commentators, they have helpfully pointed out features of my positions that need clarification and elaboration. I am grateful for this opportunity to undertake that task here.

James Van Slyke has already done some of that task for me. Van Slyke proposes to explicate the sense of cognitive naturalness at stake in terms of the comparative amounts of time and cognitive effort that humans must expend to acquire the ideas of popular religion as opposed to acquiring scientific ones. He offers, in short, that "religion is easy, while science is hard" (703). This alternative characterization may sacrifice some of the detail and precision that I aimed to bring to the contrast, but it does cut to the heart of one of the important implications of my view. Cognitive scientists of religion of all flavors (examples include Barrett 2012; Bering

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2011) agree that humans' standard cognitive equipment nicely outfits them for getting religion—in both senses of the term “get” and in the broadest sense of the term “religion” (more on that later). I and a few others (e.g., Wolpert 1992) have maintained that, by contrast, much (though not everything!) about scientific knowledge, including its representation, acquisition, production, examination, criticism, and evaluation, is usually difficult for human minds, often even for experienced scientists.

What Van Slyke says about the normative consequences of my positions is also accurate so far as he goes. To the extent that *Why Religion Is Natural and Science Is Not* (*WRINASIN* hereafter) reflects a conscious normative agenda, it is to enhance readers' appreciation of both the importance of science and, especially, the fragility of science. The social institutions of science are a precious cultural accomplishment that have developed and flourished infrequently in human history (McCauley 2013a, b). They play a pivotal role in the improvement of human knowledge and the improvement of the human condition.

Van Slyke comments (702) that “[j]ust because something is cognitively easy does not necessarily diminish its value and worth for society,” and he highlights a lot of recent research that suggests that religious participation seems, on average, to carry various benefits for those involved. (He correctly concedes that that research is not uncontroversial; Galen 2012.) Van Slyke adds (704) that “using agency and Gods as a starting point for reflection on ways to live and determining ultimate value is not necessarily worse than other starting points for that type of reflection.” I am quite confident that deploying the concept “agency” in undertaking reflection on morality and metaphysics is an *inevitable starting point*. I italicize all three words, because I wish to stress that it is inevitable that we start there (we always start with our maturationally natural proclivities of mind, for those domains in which we have any, and an agentic perspective is one of those) but also because I want to underscore that it is *only* a starting point. Sophisticated moral reflection is, by now, a long-standing intellectual tradition that all sorts of thinkers pursue, not the least of which includes philosophers and theologians. Although gods have certainly played a role in the tradition of Western philosophical reflection on normative ethics, they are a ladder that was, at best, long ago kicked away in the work of plenty of moral philosophers. Arguably, 350 years ago Spinoza began dismantling much of the *standard* conceptual accoutrement surrounding both the notion of god and that of (human) agency in morality and metaphysics.

Van Slyke accurately summarizes the most important message represented by Figure 5.1 in *WRINASIN* (McCauley 2011, 231) when he states (703) that “[a]ccording to his cognitive thesis, the largest difference between domains of knowledge is between popular religious beliefs (which are highly influenced by maturationally natural cognition and appeals to agency) and science (which is the farthest removed from maturationally

		appeals to agent explanation/causality	
		unrestricted	restricted
preferred type of cognitive processing	reflective	theology	science
	maturationally natural	popular religion	commonsense explanations and understandings of the non-social world

Figure 5.1. Cognitive Asymmetries

natural cognition and highly restricts agency explanations).” Van Slyke has the details right here, and he has also sketched the big picture properly. He discusses these matters in terms of *comparative* levels of influence and in terms of *relative* remove and restriction. The 2×2 character of the table represents (near) endpoints on what are, in fact, in *both* dimensions, continua. Van Slyke’s focus (704) on the narrative mode of representation and expression, its fundamental reliance on intentional agency, its centrality to popular religion, and, thereby, its inescapable influence in theology accentuates a key distinction here. Although the table’s horizontal dimension, viz., appeals to agent explanation and causality, *is* a continuum, the history of modern science is the story of its progressive restriction over time on the domains in which appeals to agent explanation and causality are regarded as legitimate. Science has, by no means, purged agency altogether, but this trend in scientific research suggests that its position is gradually shifting toward this continuum’s endpoint, which is to say that the distance between it and theology on this continuum is slowly increasing over time.

Discussing the continuities underlying this table occasions a turn to Aghapour's comments and to an all-too-familiar topic, viz., worries about definitions. Aghapour accuses me of employing "artificial divisions" (the title of his first subsection), though he concedes (711) that "[p]erhaps artificial distinctions are necessary first steps for isolating those parts of the world that we wish to study." Perhaps? How else might inquirers identify the things they wish to study without making distinctions?

No doubt, that response misses Aghapour's major concern. His complaint is not about distinctions but, rather, about their *artificiality*. Interestingly, though, neither Aghapour nor Cho (2013) nor Smith (2010), both of whom he cites, *ever* spell out what exactly makes for artificiality in distinctions, let alone demonstrate that they have some nonartificial means for clarifying what nonartificial distinctions are. This is especially puzzling, since these scholars are all, so far as I can tell, champions of the *artificiality* of human knowledge, from which it would seem to follow that *all* distinctions are artificial. They all repeatedly remind us that scientists *make* knowledge rather than represent the world as it really is. I should note that I have no problem with that assertion, properly qualified, but I await their explication of the artificiality as opposed to the nonartificiality of distinctions, concepts, and terms. I can think of no better justification for deploying some distinction or some rough and ready definition (whether it counts as artificial or not on Aghapour's view) than that it is employed in or, at least, readily comports with a well-corroborated explanatory theory about some pattern in the world and the mechanisms that are, in part, responsible for it (Bechtel and Richardson 2010).

Aghapour holds (710) that "[c]ognitive naturalness also points to *too specific* a set of phenomena to serve as an essential or foundational attribute of either religion or science." But, to repeat (McCauley 2013b), I never make any claims in *WRINASIN* (or anywhere else, for that matter) about essential attributes of religion or science or even about essential attributes of religious or scientific cognition. Although I often discuss what I call the "cognitive foundations" of religion and science, I have presumed that the contexts have always made completely clear that I was *never* using that term in the epistemically loaded sense of "foundation" (as in "foundational" or as in foundationalism in epistemology).

Aghapour goes on from here to observe (712) that "[d]efinitions are overrated . . . because they tell us where to look and can thereby distort our inquiries." I agree that definitions are (hugely) overrated (by scholars of religion, it seems, especially), but Aghapour draws that conclusion for the wrong reason. Definitions are not overrated because they tell us where to look. *That* is the principal thing that is useful about them! (Does Aghapour think it is better to have no shared, explicit clues about where to look? If so, then what is his account of linguistic communication? If not, then wouldn't something like definitions, *on his account*, be the most

straightforward explicit clues we would start with?) Peterson is clear about this. He holds (725, endnote 2) that “forming good definitions is important and integral to the progress of science, since doing so resolves ambiguity.”

The reason that definitions are overrated is that people tend to think that definitions (1) stand independently of subsequent theoretical change and empirical findings and (2) are not tentative, but firm—and important because they are firm. Aghapour envisions such firmness. For example, he comments (713, emphasis added) that “McCauley argues that artificial distinctions can be productive . . . and that definitions ought to be eschewed or at least delayed *until the serious work of an investigation has been completed.*” Complete investigations, presumably, yield firm results. This is not an accurate characterization of my view, however, because I do not subscribe to the assumption that scientific investigations can *ever* be completed. Science is perpetually tentative, though, admittedly, from the practical standpoint of the researcher some parts of it are, at any given time, more or less tentative than others. Perhaps, though, this is what Aghapour means when he suggests near the end of his comments that we abandon the task of defining things like religion and science.

According to Aghapour, philosophical naturalists, like me, have a responsibility to study the genealogies of the concepts they are interested in, which he takes (712) to be “crucial to the process of bracketing” definitions. For a host of reasons (including items (1) and (2) in the previous paragraph), I strongly prefer to speak in terms of *the tentativeness of characterizations* rather than *the bracketing of definitions*. Still, I am sure that such genealogical research never hurts. It is not, however, if you will pardon the term, *definitive*. That is especially true with regard to theories and concepts implicated in the fluid, active empirical and experimental research of the sciences.

Aghapour moves on from these philosophical matters to ideas about religion and the genealogy of that concept. He thinks (713) that drawing conclusions about religion is particularly fraught, since the relevant genealogy suggests that it is “an ambiguous ideological shadow.” By now it should be clear that I am unafraid of trying out tentative theoretical proposals that have implications about what things are and are not. Of course, this will involve choices about what to count as relevant phenomena and what to set to the side. The issue is the grounds on which those decisions are made.

Aghapour is mistaken in thinking that I regard either religion or religious cognition as “a coherent, natural phenomenon” (714). I meant to deny both when I stated that “[r]eligions variously activate cognitive inclinations that enjoy neither a logical nor a functional unity. *Cognitively speaking*, they are like Rube Goldberg devices . . .” (McCauley 2011, 154–55). The maturationally natural cognitive systems underlying the sensibilities and endeavors that make up what I have called “popular religion” do not possess a psychological unity—as Peterson stresses (714). They address diverse domains including language, face processing, taste aversion, kin

detection, action representation, fear of spiders and snakes, and so on. I am making claims about features of forms of cognition that occur cross-culturally and underlie a good deal of the human thought and activity that most people, who are interested in such matters, fairly readily call “religious.” (Note that these cognitive dispositions underlie lots of other things as well such as folk tales and fantasy, and comic books and cartoons, and theater and close order drill.)

Aghapour begins his invitation to joint inquiry worrying about traps to which my position may fall prey. He fears (714) that a “. . . risk . . . is that it entails cutting out elements that play important causal roles, resulting in a picture of religion that will seem impoverished compared to anthropological or historical accounts.” There is always that risk. It is true that scientific researchers look for general patterns underlying surface multiplicity. Moreover, I do not doubt that cultural and historical biases and complexities influence inquiries about candidate religious topics at nearly every turn. Aghapour is right that sensitivity to such matters and obtaining deeper understandings of particular cases will result in improved accounts of what is going on.

The suggestion, however, that cognitive analyses must inevitably ignore anthropological and historical research is simply not true. With regard to historical accounts, in its own short history the cognitive science of religion has inspired multiple volumes exploring the ability of cognitive theories to illuminate historical materials and the ability of historical materials to test and correct cognitive theories (Whitehouse and Martin 2004; Loumanen, Pyysiäinen, and Uro 2007). With regard to anthropological accounts, not only are a number of distinguished anthropologists practitioners of the cognitive science of religion, but no one has looked at differences in cognition across cultures more systematically or insightfully than the teams of anthropologists and cultural psychologists who have been most involved in the cognitive science of religion (e.g., Henrich, Heine, and Norenzayan 2010). No area of cognitive science has been more assertive about the need to do situated, cross-cultural experimental research (e.g., Xygalatas et al. 2013). Sometimes, though, the cross-cultural findings suggest that some patterns are impervious to cultural variability. The age, for example, at which children show sufficient understanding of theory of mind—so that they can articulate correct predictions about people’s behavior when they have false beliefs—appears to vary little across cultures (Callaghan et al. 2005).

We should be no less concerned that anthropological and historical accounts of religious phenomena risk cutting out elements that play important causal roles, resulting in a picture of religion that will seem impoverished compared to accounts of religious cognition.¹ All approaches (scientific and humanistic) give *partial* accounts of phenomena and their causes, all of the shrill claims that too many humanists make about

reductionist explanations in science notwithstanding. I have argued at length (McCauley 2007) that reductive explanations in cross-scientific settings have none of the deleterious consequences that scholars throughout the humanities and religious studies presume that they do. The successful *interlevel* reductions at stake are *always* local. They provide no full or complete explanations. (Science never provides full or complete explanations.) They vindicate rather than eliminate alternative ontologies.² They do not explain things away.

Nowhere in any of Aghapour or Cho's comments do they discuss even one of the dozens of relevant experimental studies that I cite (cf. McCauley 2013b, 166). As Van Slyke documents, research on religious cognition has provided all sorts of interesting findings and intriguing insights about the penchants of mind that make for beliefs and practices that scholars routinely treat as religious. Inattention to such work may result in overlooking suggestive accounts of claims they find of interest. So, for example, Aghapour asserts (713) that its "complicated genealogy is what gives religion its distinct double-valence in our language as a something that's simultaneously particular and ubiquitous." I think that Aghapour overestimates the impact of scholars' analytical categories (such as "religion") on how we see the world. From a cognitive perspective, religion's double valence is no different than the double valence of natural language. These are the inevitable features of the interaction of humans' maturationally natural capacities (for language and for the various systems on which religious turns of mind depend) with the incredible variety of cultural materials that impinge on them (people's actual utterances and practices and their natural and constructed environments), which end up infiltrating and tuning those maturationally natural proclivities, shaping everything from languages and religions, on the one hand, to such basic systems as visual processing and contamination avoidance systems, on the other (McCauley and Henrich 2006; Boyer and Liénard 2006, especially 608).

Disregarding the empirical research is a concern, because when Aghapour turns to my substantive claims about cognition, his comments miss the mark *very nearly completely*. For example, he remarks (709) that "although it is indeed the case that many religious concepts are acquired easily by children and many scientific concepts are difficult to master, it is also true that many children can recite multiplication tables and name the chemical formula for water but find it impossible to explain the doctrine of the Trinity." In short, that is because recitation and explanation are very different activities. Let me elaborate. His assertions are out to show that sometimes science is easy and religion is hard, but recitation of the multiplication tables is the result of earnest *practice*; it is not a maturationally natural capacity. The same is no less true of naming the chemical formula of water, although it requires, no doubt, less practice than memorizing the multiplication tables. The misunderstanding runs even deeper though with

regard to naming the chemical formula for water. Consider, Aghapour cites children's inability to explain the theologically sophisticated doctrine of the Trinity as evidence that some religious concepts are quite difficult. (This is the one thing that is right in this passage. I explicitly argue that theological formulations, like scientific ideas, involve radically counter intuitive representations.) But, on the one hand, with less work than children spend on learning their multiplication tables, they can also learn to *recite* the doctrine of the Trinity, and, on the other hand, their ability to recite either the doctrine of the Trinity *or the chemical formula for water* does not reflect an ability to *explain* either of them! Recall Van Slyke's observation (700) that "[s]tudents can often memorize the procedure involved in the computation of a statistic (either by using a calculator or a computer), but very often fail to understand the concept behind it. . . . Several studies demonstrate that persons are unable to correctly use statistical concepts even after formal instruction." That is how it often goes with difficult ideas—whether mathematical, scientific, or theological.

Aghapour insists (713, emphasis added) that "the term 'religion' does not point to a stable or essential thing in the world, but is rather a loose and shifting category that has been variously deployed to describe cultural phenomena, social groups, mental states, and material practices *according to the particular aims and interests of those doing the defining.*" I could not agree more. I trust that Aghapour, unlike Cho and Smith, intends to extend this benefit-of-the-doubt, at least for-the-purposes-of-discussion, to my and others' cognitive proposals. It seems apt given, first, that I have systematically employed claims a good deal *weaker* than talk about defining things (their persistent talk of definitions notwithstanding), second, that I review dozens of relevant empirical studies, and, third, that I explicitly stress the identity of the causal mechanisms underlying uncontroversial religious representations and practices and those that arise in a variety of other quarters from folklore to football.

When he turns to science, Aghapour defends my views against the more severe charges Cho and Smith lodge. Still, he cautions (710) against neglecting the heterogeneity of the sciences and against entertaining a conception that they might "be unified under any single attribute or principle." That, of course, depends upon how broadly or narrowly science is construed. I concur with Aghapour's claim when science is conceived broadly, and I mostly concur, even when science is construed more narrowly to focus, first and foremost, on institutionalized, professional science in the modern era and the approximations thereof in ancient Greece, in the medieval Arab world, and briefly, perhaps, in ancient China (Boltz, Renn, and Schemmel 2003; Al-Khalili 2011; Schemmel 2012). I have spent much of my career in the philosophy of science exploring precisely cases illustrating disunities among the sciences, casting them in terms of "explanatory pluralism." (Representative publications include McCauley 1986, 1996, 2013c).

What I suspect Aghapour and I disagree about are the epistemic consequences of these facts about science. I do not think that any of these considerations undermine the historical and epistemic exceptionalism of science (in that narrower sense). This is not scientific triumphalism, though. It is only the more modest claim that modern science is second to none in generating valuable explanatory and predictive knowledge about the world (McCauley 2013a).

Peterson plainly signals in his final paragraph that he values the cognitive science of religion, even if he thinks its explanatory powers may be somewhat overestimated. He also seems less skeptical about the importance and rarity of science generally. He states (720), for example, that “we already knew that religion is universal and science is not.” Well, maybe not everybody. Rejecting any strong distinction between science and technology, Smith, in effect, maintains that science is done in all human cultures. Some anthropologists have suggested that even animals do science, and some developmental psychologists hold that babies are scientists in the crib (McCauley 2013a). Science is a no less contested category, it seems, than religion.

Alas, Peterson too worries about putative definitions—especially the definition of maturationally natural cognition.³ He claims (719) that I concede that “a defining feature of MN traits is their (near) universality” yet he objects that “there are many beliefs such as ‘the sun rises in the east’ and ‘only women give birth to children’ which are universal but not obviously ‘natural’ in any relevant sense.” I did *not* mean to concede that universality is a “defining” feature of maturationally natural dispositions of mind. All maturationally natural traits are (nearly) universal, but not all (nearly) universal traits are maturationally natural, as Peterson’s two examples illustrate. Conversion is not a valid transformation of a universal affirmative proposition. From the claim that all bears are furry animals, it does not follow that all furry animals are bears. Other characteristic features of maturational naturalness rule out one or both of Peterson’s putative counterexamples, even though they are (nearly) universally endorsed: (1) they do not concern what is mostly unconscious knowledge, (2) they have to be taught and we may well remember learning them, (3) they are, by no means, intuitive, even for some adults, and (4) they are not difficult to articulate. Artifacts are inherent to his futuristic counter-examples of internet surfing and driving, but the emergence of maturationally natural capacities does not depend on artifacts. Moreover, it seems obvious that both activities require considerable practice.

Peterson raises a variety of matters pertaining to practiced and maturational naturalness. Regarding practiced naturalness, he rightly notes (725, endnote 2) that these cognitive predilections are not always “practiced in an obvious sense.” I use the term “practiced” here to capture both considerable exposure or experience with some cognitive domain (like political arrangements) as well as literally practicing some actions to the point that

we become skilled. Peterson is incorrect, however, to suggest that forms of practiced naturalness are always “widely spread” in a culture. Some (riding bicycles) are. Some (piloting F-16s) are not.

Returning to maturational naturalness, Peterson accurately reports that I make *no* claims for the innateness of maturationally natural proclivities. I do not deny that many maturationally natural dispositions may have genetic foundations and that penchants of mind rooted in our genes will almost certainly qualify as maturationally natural, but it is a huge leap from these modest claims to the quite extravagant commitments that claims about innateness are often assumed to entail. The distinction between these two forms of cognitive activity can be made out satisfactorily without appeal to this criterion (McCauley 2011, 5–6).

The fact that most maturationally natural cognitive systems are up and running by school age would raise “important problems for understanding features of religion that are not cognizable or performable by children” (719), *only* if I held that everything about religion was grounded in maturationally natural inclinations, but I do not even hold that everything about religious cognition is so grounded. I stress at many points in *WRINASIN* that there are all kinds of reflective cognitive activities associated with religion, not the least of which is theological reflection, at least among literate peoples.

Peterson asks what the balance is between implicit maturationally natural cognition and explicit religious reflection in the explanation of why people believe what they do. It is clear from the final pages of his comments that for Peterson obtaining better answers to that question will, among other things, be in service to his interests in the epistemological status of religious claims. I suspect that the new cognitive proposals and findings may inspire and, perhaps, eventually constrain such reflections, but I am sure that they will not determine the verdicts to such normative questions. I have not pursued these questions for two reasons. First, I am much more interested in scientific questions about cognition and religion. Second, contributors, including Peterson, have overwhelmingly undertaken these discussions within the framework of reliabilist epistemology, in which I see little promise.

Peterson argues (722) that if the impact of conscious and explicit deliberation could explain even 40 percent of the variance with respect to some religious phenomenon, it would be “highly significant.” I agree; maturationally natural features of mind do not account for very much about the contents of reflective theology, so Peterson concludes that the explanatory scope of cognitivists’ proposals about religion is less sweeping than might appear. Of course, how sweeping it appears depends upon whether I or other cognitivists contend that everything about religion or religious cognition is grounded in maturationally natural capacities. To repeat, we do not. Still, Peterson’s point is well taken that in cultures with widespread literacy (a very

recent phenomenon in human history) many participants have orthodox religious representations ready to consciousness and reflective cognition.

An interesting question is how central having religious representations ready to consciousness and reflection is for explaining much of what religious people think and do. It is worth noting that none of this undermines cognitivists' findings about theological incorrectness when (literate) religious participants carry out online cognitive processing of religious materials. (Religious participants may be able to *recite* doctrines, but it does not follow that they deploy them online.) Peterson may doubt this, claiming (723) that participants in the Barrett and Keil (1996) experiment "revert not to modestly counterintuitive agency, but normal agency," but that is simply not true. When they later recalled the theologically correct narratives that they had read, Barrett and Keil's participants basically treated God like Superman. So, for example, although it takes time for God to get from one place to the next, which is certainly like normal agents, he covers vast distances at rates that are beyond anything intuition tells us about "normal agency." Is Superman more like a normal agent or like a counterintuitive agent? Superman *is* a counterintuitive agent (just not a religious one).

It is just these and other findings (e.g., Schjoedt et al. 2011) in the cognitive science of religion that lead to the suspicion that Peterson may overestimate the importance of theology, doctrines, and their concomitant institutional arrangements in the transmission even of theologically sophisticated religions. A simple historical observation also seems relevant. The three great Western religions of the book, after all, are all more than a thousand years old (considerably more in the case of Judaism), but widespread literacy in *any* culture has arisen only in the last few hundred years. Similarly, when the question is about the relevant *cognitive* dynamics, Peterson's comments about what the Eucharist means for Catholics also suggest undue attention to explicit doctrines, their recitation, and their conscious representation. I should clarify that I have never pretended to explain what the Eucharist means for Catholics; nor am I out to "define Catholic beliefs and practices," and I have *no idea* "what Catholicism really is" (Peterson 2014, 722). Instead, I only offered the Eucharist and baptism as (familiar) examples of types of rituals, that the theory of religious ritual competence systematically distinguishes (Lawson and McCauley 1990; McCauley and Lawson 2002) and that have different constellations of properties, which, in fact, the Eucharist and baptism have, respectively.

Peterson explicitly acknowledges that I eschew all pretensions to comprehensive explanation, yet he faults (722) my position for failing to explain Catholicism. But, again, neither I nor any other cognitive theorist has claimed that we have an explanation for Catholicism, let alone that the considerations I was highlighting in the passage in question explained Catholicism. In citing religious participants praying to nearby statues,

burying St. Joseph icons in their yards to expedite real estate sales, and the like, I was responding to Peterson's (2013) contention that evidence for maturationally natural features in the Western monotheisms is scant. In fact, it is abundant beyond measure.

Van Slyke reviews multiple repositories of evidence for the influence of implicit cognition downstairs on explicit cognition upstairs. Why would we expect that religious cognition and behavior would be decidedly different from, say, consumer cognition and behavior, where Van Slyke observes (698) that the role of conscious reflective activity "may be overestimated?" Plenty of people, at least since Freud, have thought that human mental life is like an iceberg, which is to say that much, maybe most, of what matters is unobvious and below the surface, however bright, shiny, and impressive the portion above the surface seems. The cognitive sciences have developed multiple means for probing those depths from which many things about religious thought and behavior arise.

NOTES

This article is based on the author's response to a panel presentation sponsored by the Cognitive Science of Religion Group and the Science, Technology, and Religion Group at the annual meeting of the American Academy of Religion, Baltimore, MD, November 23, 2013. The panel discussion focused on the author's book *Why Religion Is Natural and Science Is Not*.

1. Peterson's final sentence suggests that he, as I, would endorse my claim here and Aghapour's parallel claim I quoted above.

2. Progress in science can result in the elimination of theories and their ontologies, but those are not the outcomes of interlevel reductions, which are the kinds of cases that scholars of religion are concerned about (McCauley 1986, 1996, 2007, 2013c).

3. He speaks (Peterson 2014, 717) about a "key defining feature" and my alleged "stated definition."

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