

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."

DEFINING "RELIGION" AS NATURAL: A CRITICAL INVITATION TO ROBERT MCCAULEY

by Andrew Ali Aghapour

Abstract. Previous critics have argued that Robert McCauley defines religion and science selectively and arbitrarily, cutting them to fit his model in *Why Religion Is Natural and Science Is Not*. McCauley has responded that final definitions are "overrated" and that artificial distinctions can serve an important role in naturalistic investigation. I agree with this position but argue that a genealogy of the category of religion is crucial to the methodology that McCauley describes. Since the inherent ambiguity of religion will undermine any essential claims about its cognitive naturalness, I invite McCauley to consider how his research might investigate scientific and religious cognition in new terms.

Keywords: cognitive science of religion; epistemology; genealogy of religion; naturalism; naturalistic accounts of religion; philosophy of science

Where my fellow respondents have offered some valuable insights from within the cognitive science of religion (CSR), my task here is to critique Robert McCauley's *Why Religion Is Natural and Science Is Not* from an outside perspective. Although I first attended graduate school in order to become a CSR practitioner, I had difficulty reconciling its analytic thought styles with the critico-theoretical perspectives that inform, among other disciplines, the contemporary philosophy and sociology of science and the study of religion as an intellectual category. I was also perplexed by

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the academy's persistent "two cultures" ideology, which reduces humanists and scientists alike to self-defeating, incoherent caricatures of themselves. These divides are in fact now the subject of my own research, which approaches the recent "biocognitive turn" in religious studies as a case study in the intellectual history of religion and science. I am interested in moving beyond the staunchly oppositional stances that typically characterize conversations between CSR and critical theory practitioners. The following essay has four sections. In the first two, I summarize a recent debate between McCauley and two critics and then take up McCauley's defense of the inherent artificiality of definitions. In the third section, I elaborate a genealogy of "religion" as a category, which informs my critical invitation to McCauley in the fourth section.

ARTIFICIAL DIVISIONS

I write today as critical theorist of religion with an interest in how *religion* and *science* are constructed as categories in Robert McCauley's work, and I am not the first to take up this call. In her book *Natural Reflections*, Barbara Herrnstein Smith emphasizes the cognitive similarities between science and religion that are overlooked within McCauley's model. For example, 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 (Smith 2010, 131). For Smith, it appears that across various domains of thought—religious, scientific, philosophical, and otherwise—there are some concepts and routines that are acquired readily and others that require specialized education and long apprenticeship for mastery (Smith 2010, 131).

For Smith, McCauley's thesis that religion is natural and science is unnatural requires some significant intellectual gerrymandering. Religion and science are complex social domains that inevitably both involve both natural *and* unnatural cognitive processes; McCauley's contrastive characterizations therefore require a series of conceptual oversimplifications and historical anachronisms. Religion and science must be monolithically conceived, for example, and distinguished from intertwined phenomena that might challenge this binary. Smith devotes a number of pages to tracking the "artificial" and arbitrary divisions required to uphold McCauley's thesis, such as the distinction between "religion" and "theology," or between "science" and "technology" (Smith 2010, 131–36). If religion and science must be cut to fit McCauley's model, then perhaps cognitive naturalness is simply too blunt a tool to be useful for fine-grained scholarly work.

I will turn to McCauley's useful response to Smith shortly, but first I will briefly summarize Francisca Cho's related critique of *Why Religion Is*

Natural and Science Is Not. In a book symposium recently published in *Religion, Brain, and Behavior*, Cho maintains that McCauley's selective definitions of religion and science reflect an ideological commitment to scientific exceptionalism (Cho 2013, 1–6). For Cho, McCauley's narrow emphasis on science's "unnatural" cognitive processes (e.g., "radically counterintuitive" representations that go "beyond the appearances") perpetuates the notion that scientific knowledge somehow uniquely transcends the cognitive structures, symbolic systems, and social dynamics involved in human knowledge making (McCauley 2011, 106–07).

Having seen McCauley adamantly deny the transcendence of science in person, I suspect that he and Cho would likely agree that Western science is a historically situated set of discourses and that scientific norms like falsifiability and mutual consistency do not make claims to absolute truth. However, as Cho's critique illustrates, attempting to isolate and identify science's transcultural cognitive foundations runs the risk of perpetuating the notion that science is simply the activity of mirroring nature—of representing the world as it "really is" beyond our mediating instruments and symbols. Contemporary philosophers, historians, and ethnographers of science have largely abandoned this "representational idiom" for a number of reasons. First, it seriously downplays the role of people and things in the production of knowledge and thereby skirts along transcendental representations of truth (Pickering 1995, 5–9). Second, the representational idiom uncritically assumes a "unity" or essence to science, where it is now clear that epistemological architectures of the sciences are far too heterogeneous to be unified under any single attribute or principle (Cetina 1999, 1–17).

For both Cho and Smith, McCauley's inquiry into the cognitive foundations of religion and science has been distorted by some problematic and outdated assumptions. Cho and Smith's critical contribution is to make us aware that many commonsense notions about religion and science are in fact intellectually fraught.

DANGEROUS DEFINITIONS

Stepping back out a bit, I'd like to point out that Smith and Cho take similar tacks in their critiques of McCauley's model. Smith and Cho both argue that the category of "cognitive naturalness" is simultaneously too broad and too specific. It is *too broad* to make sharp distinctions between religion and science unless one is artificially selective about what counts as religion and what counts as science; both authors focus on where McCauley's artificial "cuts" are made since they seem to evince some artifice. Cognitive naturalness also points to *too specific* a set of phenomena to serve as an essential or foundational attribute of either religion or science. In following with a general thought style of critical theory, Smith and Cho appeal to the multiplicity and disunity of both science and religion.

Thus “science” ranges so widely in its conceptual paradigms, empirical approaches, instrumental practices, and epistemic values, one might say, that any meaningful discussion of its cognitive processes will need to be limited to local investigations of particular scientific networks.

In short, Smith and Cho both take issue with the categorical divisions required to pigeonhole religion and science into McCauley’s model. McCauley’s responses to Smith and Cho are valuable for many reasons, but I would like to specifically focus on McCauley’s defense of the “artificiality” of definitions. In *Why Religion Is Natural and Science Is Not* McCauley responds to Smith’s critique by arguing that “to the extent that the distinction I draw between science and technology is not perceptually manifest and depends on a variety of different considerations . . . perhaps it is artificial. Artificiality in that sense, however, makes the distinction no less useful. Artificial distinctions—such as those between retail and wholesale [or] between novels and novellas . . . —abound and are far from meaningless” (McCauley 2011, 89–90). Similarly, in his symposium response to Cho and others, McCauley states:

Definitions are overrated (except in the formal sciences). Empirical researchers sort out workable characterizations of concepts in the process of investigating the merits of theoretical proposals. I am a philosophical naturalist. Thus, I subscribe to Quine’s (1953) wariness about any strong distinction between conceptual and empirical knowledge. Neurath’s (1932/1983) famous analogy got the semantics of empirical inquiry right. He held that such a project was like mariners having to rebuild their ship at sea, without any available dry dock.

Definitions matter to some of my commentators, who fail to understand that nowhere in *WRINASIN* do I propose the definitions that they presume . . . I eschew definitions not just because discretion is the better part of valor, but because in naturalistic inquiries words get their meanings in the course of the continuing research about the theories in which they appear and under such circumstances proposed definitions reliably prove—sooner or later—only partial, at best. (McCauley 2013, 47)

McCauley raises a very interesting point here. Perhaps artificial distinctions are necessary first steps for isolating those parts of the world that we wish to study. After all, one of the great hallmarks of contemporary science is the experimental method, which separates objects from their natural orders. In this view, artificial distinctions are epistemologically valuable and large-scale definitions might be poised—provisionally—atop fine-grained investigations of component parts.

I also read McCauley to be saying that he self-consciously eschewed preexisting definitions of “religion” and “science” over the course of his inquiry as a means of mitigating the risk of artificially limiting or biasing his inquiry. This is a crucial gesture. A staunch commitment to defining religion as transcendent, for example, would forfeit attention to a vast array of social, economic, and cognitive forces that are constantly at play

in religious cultures. Similarly, if one were to rigidly equate science solely with reductionism, he or she might miss out on a wide range of scientific and mathematical discourses concerned with properties of emergence. Definitions are overrated, then, because they tell us where to look and can thereby distort our inquiries.

Although I firmly agree with McCauley's argument that definitions ought to be bracketed during the course of empirical research, I also think that this is incredibly difficult to do when it comes to phenomena as wide ranging, complex, and ideologically fraught as science and religion. A better understanding of how umbrella terms like "religion" and "science" came to hold their current meanings is crucial to the process of bracketing. It is, therefore, the responsibility of the philosophical naturalist to engage with genealogies of the concepts they study.

RELIGION AS AN INTELLECTUAL CATEGORY

"Religion," we have learned, is a relatively recent term, and its genealogy offers a kind of probe into Western intellectual history. It emerged in the sixteenth century as an anthropological tool for describing the various peoples encountered during explorations of the New World. An early focus on rituals and creeds allowed missionaries and explorers to compile inventories of cultural topics that could be compared and ordered (Smith 1998, 269–71). Meanwhile, amidst the European wars of religion, intellectuals at home were seeking out solutions to what they saw as the categorical problem of religious disputes: that contradicting claims about absolute truth do not have any transcendent criteria for solution (Preus 1996, xiv). The new category of religion that was forged abroad became valuable for—and was increasingly mobilized by—peacemakers who wished to confine religion to an element of culture like any other, appealing to the recent and much-vaunted scientific method as an arbiter of disputes (Harrison 2002, 2).

By the end of the seventeenth century, these and other historical factors led to the stabilization of the concept of "natural religion," defined as a universal and innate set of beliefs and practices across the globe. The anthropological project of describing natural religion privileged similarities and explained away differences as either historical idiosyncrasies or the results of degeneration. By the eighteenth century, the search for natural religion had also mutated to naturalistic investigation, utilizing similar methods and frameworks while transposing religion from a supernatural to a natural history (Smith 1998, 273).

Thus, as historian Peter Harrison points out, the category of "religion" and the strategies for its elucidation were developed in tandem. The comparative method and the search for universals did not occur in a vacuum, but at a particular socio historical moment informed by the exploration

of a diverse new world, the rise of natural science, and a theological crisis within Christianity. Within this particular context, propositional beliefs tended to be disembedded from their social, economic, and cultural contexts and then evaluated for their accuracy in ways that made comparison possible while simultaneously championing Enlightened forms of reasoning (Harrison 2002, 2).

Numerous other scholars have helped to trace the emergence, proliferation, and reification of “religion” as a concept. Over the course of the last two decades, it has become increasingly clear 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. “Religion”—like “novella” and “retail”—is a useful term for dividing up the world, but it lacks cross-cultural and transhistorical specificity because it is specific to our Western intellectual inheritance. Thus, as Talal Asad has famously demonstrated, it would be a category mistake to attempt any universal definition of religion across cultures and historical periods (Asad 1993, 29). This would be like entering a heated debate about whether an ancient papyrus scroll was a novel or a novella: anachronistic, and not particularly useful.

This complicated genealogy is what gives religion its distinct double valence in our language as a something that is simultaneously particular and ubiquitous. At first, religion seems to involve almost every human phenomenon: beliefs, rituals, identity formations, material practices, clothing, commodities, ethical propositions, origins stories, textual practices, types of space, and all sorts of things dead, alive, and in between. Simultaneously, and in keeping with the comparative method that helped shape it, religion appears to be shot through with core properties that can unite its disparate iterations that sprawl across time and space.

The danger here, as we’ve seen in generation after generation of scholarship, is that one can easily lose track of the artificial divisions that *already precede* our colloquial understanding of religion. The category of religion is a lens that arrives already focused: on individual beliefs and worldviews that can be compared against the scientific gold standard; on cross-cultural patterns that fix religion in nature; and away from the power dynamics that continuously flow between religion and other economic, social, and political forces. McCauley argues that artificial distinctions can be productive if they are conscious methodological choices and that definitions ought to be eschewed or at least delayed until the serious work of an investigation has been completed. As the genealogy of “religion” indicates, however, this is especially difficult if one’s object of study is already an ambiguous ideological shadow.

A CRITICAL INVITATION

Although McCauley approaches religion with a wide scope in *Why Religion Is Natural and Science Is Not*, the task of categorizing religion as “natural” harkens back to seventeenth and eighteenth century investigations of “natural religion” and falls into similar epistemic traps. McCauley writes, “I contend that a small number of variations on a limited set of elements lies beneath the assorted myths, rituals, beliefs, doctrines, icons, sacred spaces, and more that humanity’s religions present . . . Their superficial diversity notwithstanding, religions share the same cognitive origins and vary within the same limited framework of natural cognitive constraints” (McCauley 2011, 152).

Some risks associated with the comparative method are apparent here. Taking religion to be a coherent, natural phenomenon, for example, requires universalizing it across cultures, and this entails choosing what religion is and what it isn’t. The inherent ambiguity of the term religion makes this sort of gerrymandering necessary, but clear borders are difficult to draw. This is reflected, as Smith has observed, in the need to define religion, against theology, as “folk” religion. Another risk of this methodological gesture 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. In order to isolate elements of religion for comparison, one must separate them from a web of causal relationships and contexts. This is reflected in the almost total absence in McCauley’s text of theories of power and sociality, which play a significant and demonstrable role in the development of cognitive-cultural formations like science and religion. For a critical theorist of religion, reading *Why Religion Is Natural and Science Is Not* can at times be quite frustrating: McCauley has plenty of insights to share, but his analytic thought style seems to involve dividing the world into smaller and smaller pieces that become increasingly abstract and brittle.

Of course, every theory has its focus and its resulting limitations. The measure of a theory isn’t its explanatory totality, but rather its productivity towards generating reliable knowledge. If we wanted to commit to some tentative definitions or essences of religion and science, those proposed in this book could certainly take us very far. We could say religion refers to a bounded set of folk beliefs and repeated behaviors that closely correspond to recurring cognitive patterns. Even though that’s just a small wedge of a big and messy pie, it’s a definition that would certainly promote a number of interesting inquiries. We could also say that science refers to a largely cognitive process of disciplined thinking, utilizing rarefied methods within social institutions to produce empirically falsifiable knowledge. Once again, this seems to take a particular and important dimension of contemporary techno-science and lift it up as essential and transhistorical in such a

way that it overlooks some phenomena and distorts others, but we could well make this choice. My invitation, however, is to embrace Professor McCauley's insight that definitions are overrated, and to consider what it might look like to abandon them all together.

Where Smith and Cho offer valuable critiques of the limitations associated with McCauley's definitions of religion and science, I would like to invite him into a conversation about whether such definitions are needed at all. If religion and science are vague categories that are themselves too broad and too specific to refer to any essences, why not abandon the task of continually redefining them? How might we create a more supple approach to cognitive naturalness that is able to capture the myriad intersections between religion and science?

NOTE

This article is based on 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 Robert McCauley's book *Why Religion Is Natural and Science Is Not*.

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