Science and Religion: Compatible or Incompatible Explanatory Realms?

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Abstract
Among portrayals of evolutionary biology and intelligent design, some evolutionary biologists and organizations have claimed religion and science are compatible, commonly referred to as ‘accommodationism.’ This claim is, from the perspective of science, wholly incorrect. While religion and science are similar in that both seek causal explanations for natural phenomena, this does not render the two approaches compatible or not in conflict. The sciences seek causal understanding by way of theories and hypotheses that ensure understanding is open to critical, empirical evaluation. Reliance on supernatural-based theories and hypotheses are operationally immune to such testing. For religion and science to exist in a complimentary state, religious theories and hypotheses would have to be limited to explaining non-empirical, supernatural phenomena, while scientific theories and hypotheses are applied to natural phenomena. The opportunity for asymmetrical causal overlap is obviated, thus denying the accommodationist position.

Introduction
On the topic of the intersection between evolutionary biology and creationism/intelligent design, the National Academies of Science and Institute of Medicine’s (2008: 49; see also Ecklund & Park 2009) recent publication on evolution and creationism states that,

“Newspaper and television stories sometimes make it seem as though evolution and religion are incompatible, but that is not true. Many scientists and theologians have written about how one can accept both faith and the validity of biological evolution.”

In a similar vein, Ayala (2006: 90; 2008; see also Avise 2010a, 2010b; Martin 2010) states that “the theory of evolution is not incompatible with belief in the existence of God and God’s presence in the workings of the universe.” That compatibility is, according to Ayala (2007: ix), a matter of different goals between science and religion:

“Science and religious beliefs need not be in contradiction. If they are properly understood [sic], they cannot be in contradiction because science and religion concern different matters. Science concerns the processes that account for the natural world: how the planets move, the composition of matter and the atmosphere, the origin and function of organisms. Religion concerns the meaning and purpose of the world and of human life, the proper relation of people to their Creator and to each other, the

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1 Regardless of claims often promulgated by intelligent design (ID) advocates that the ‘designer’ to which they refer is not necessarily a supernatural entity, the arguments in this essay apply to that movement. ID has never presented in sufficient detail a theory of a designer from which testing can proceed (Fitzhugh 2010). This leaves consideration of the subject on par with supernatural theories.
moral values that inspire and govern people’s lives.”

There is a supposed asymmetry that seals the notion of compatibility: “Scientific knowledge cannot contradict religious beliefs because science has nothing to say for or against revelation, religious realities, or religious values” (Ayala 2006: 103).

Similar advocacy for compatibility can be found on federally-funded internet web sites, such as the University of California at Berkeley’s Understanding Science: How Science Really Works (University of California Museum of Paleontology 2009: Science and religion: reconcilable differences): “...people of many different faiths and levels of scientific expertise see no contradiction at all between science and religion,” and Understanding Evolution (University of California Museum of Paleontology 2009: Misconceptions about evolution and the mechanisms of evolution): “...most religious groups have no conflict with the theory of evolution or other scientific findings.” The Clergy Letter Project (www.theclergyletterproject.org), founded by biologist Michael Zimmerman, encourages scientists to intersect with religious groups to foster “an endeavor designed to demonstrate that religion and science can be compatible and to elevate the quality of the debate of this issue.” And, Stephen Jay Gould’s (1999) “non-overlapping magisteria” or NOMA concept has received wide attention for the view that science and religion operate in close but purported separate harmony.

The difficulty with the view that science and religion are compatible, what has become known as ‘accommodationism,’ is that it only succeeds by allowing the asymmetry quoted above by Ayala (2006). God, or any other supernatural entity², is a relevant and exclusive causal factor for at least some natural phenomena, e.g. “the meaning and purpose of the world and of human life, the proper relation of people to their Creator and to each other, the moral values that inspire and govern people’s lives,” and science is relegated to other natural phenomena. Indeed, under the heading of accommodationism, one is at liberty to ignore the standard criteria for rational inquiry that are the mainstay of the sciences and parse these causal realms with impunity.

Asserting that there are respective theories of supernatural entities and their behaviors that have causal/explanatory roles to play with regard to certain natural phenomena is an epistemic claim. As such, there is an operational equivalence between causal claims inferred from supernatural and natural theories, and thus we should expect de facto epistemic equivalence between the two realms. This equivalence would necessitate that judging the veracity of supernatural theories or hypotheses deemed causally relevant for natural phenomena would be on par with how theories and hypotheses of natural cause–effect relations are assessed in the sciences. Advocates of accommodationism would have to empirically establish that the sciences are not, potentially or otherwise, capable of addressing particular natural phenomena in lieu of reliance on the supernatural. Can the accepted and established foundations for the scrutiny of scientific

² I follow Boudry’s et al. (2010: 233) definition of supernatural: “…any phenomenon which has its basis in entities and processes that transcend the spatiotemporal realm of impersonal matter and energy described by modern science…..”
theories and hypotheses allow for the compatibility endorsed by Ayala, Gould, and some other evolutionary biologists and organizations? The goal of this paper is to point out that to impose such compatibility presents unrealistic constraints on science. By the very nature of how science proceeds as a mechanism to acquire causal understanding by way of laying open theories and hypotheses to empirical evaluation, to say that supernatural causes are efficacious alternatives to natural causes does not stand as a matter of compatibility. In point of fact, asserting compatibility is contradictory to the very nature of doing science. Ayala (2007: ix) was quoted earlier that if science and religion are “properly understood, they cannot be in contradiction because science and religion concern different matters.” Ironically, regarding this same passage, Behe (2008: 147; see also Moritz 2009) correctly points out that “if religious claims appear to call for alternative scientific conclusions, then clearly the two disciplines do sometimes significantly overlap, despite Ayala’s claims.” This essay will show that properly understanding scientific inquiry denies Ayala’s position, as well as accommodationism overall. Natural phenomena, whether related to religion or otherwise, cannot be unambiguously segregated between scientific and religious understanding.

Compatibility versus Incompatibility

In fairness to science and religion, to speak of these domains as compatible or incompatible, to whatever extent, requires acknowledging two aspects of both: their goals and the manners, if any, by which each engages in evaluative processes of their respective theories, as well as evaluations of the hypotheses that result from applications of those theories. For the purpose of this essay, I will restrict reference to ‘religion’ to only the main western religions, namely, Judaism, Christianity, and Islam. As will be discussed in this section, science and religion do have at least partially parallel goals when we consider natural phenomena. Yet it is the mechanisms for attaining their goals and evaluations of the processes for realizing those goals that are distinctly incompatible when the available causal alternatives are natural- versus supernatural-based theories and hypotheses.

Compatibility between science and religion

With regard to the natural, empirical realm, religion and science have the same intent: to causally account for objects and events we perceive. The range of such phenomena can be as broad as the nature of the universe, to smaller scales, like human ethics, behavior, and other cognitive functions. For instance, in his definition of religion, Geertz (1993: 90, emphasis original) states that it is,

“(1) a system of symbols which acts to (2) establish powerful, pervasive, and long-lasting moods and motivations in men by (3) formulating conceptions of a general order of existence and (4) clothing these conceptions with such an aura of factuality that (5) the moods and motivations seem uniquely realistic.”

The symbols and conceptions to which Geertz refers principally pertain to gods or other sorts of supernatural entities. What is relevant to the present discussion is that those symbols are not only used in the
formulation of conceptions regarding those entities, but also the intersections of those entities with nature-at-large to effect causes. At least with regard to western religions and the emphasis on God, Shermer (2000: 143) concludes that religion serves to provide humans with explanations of natural phenomena. Dow (2007: 10) characterizes religion as a “…body of behavior unified by our failure to find a simple rational explanation for it when seen from the perspective of the individual.” The behaviors Dow refers to comprise three forms, or “modules”: (1) conceptions of unobservable entities, (2) identifying particular objects, actions, principles, etc., as sacred, and (3) the actions of community sacrifice by individuals. From an evolutionary perspective, Dow regards behavior (1), the conjuring of such unobserved entities as gods, ghosts, demons, and angels to be an extension of the adaptive behavior among members of other animal species for reasoning that unobserved things are present in particular situations, such as predators. The selective advantages of such reasoning are readily apparent, even when extended to the development of human social systems (cf. Pyysiäinen & Hauser 2010).

In the case of natural phenomena intersecting with God or other supernatural agents, this subsumes a system of theories that individuals apply to objects and events for the purpose of acquiring some level of causal understanding of what they encounter. The tendency will be for individuals to demarcate those effects explicable by supernatural-mediated causes as opposed to natural or empirical causes. But individuals have the added luxury of playing supernatural and natural theories off one another to any extent desired (see below) for the purposes of seeking causal understanding.

Like religion, the sciences seek to acquire causal understanding of objects and events (Hempel 1965; Rescher 1970; Popper 1983, 1992; Salmon 1984a; Van Fraassen 1990; Mahner & Bunge 1997; Hausman 1998; de Regt et al. 2009). In contrast to religion, however, the sciences rely on empirically-grounded theories, and within that class, theories that can be either potentially tested or have survived critical tests. With regard to their mutual goals, religion and science are compatible. Both encompass classes of theories that are invoked when causal questions are asked, leading to explanatory accounts that satisfy the intrinsic needs of the inquirer. But this compatibility is compromised by the fact that a causally relevant factor in religion is the action of supernatural agents on natural phenomena, supplemented by natural causes according to one’s motivations. The sciences, on the other hand, impose strict limits to only empirical theories and hypotheses. This allows for some semblance of independence between science and religion, as noted by Ruse (2008: 167): “…science and religion are independent in that they are not dependent on each other for their conclusions.” But as will be discussed in the next section, opting for explanations of natural phenomena by way of supernatural-based causes inevitably leads to juxtaposing those alongside alternative, empirically testable explanations. This leads to an untenable contradiction relative to scientific inquiry.

**Incompatibility between science and religion**

The compatibility between science and
religion identified in the previous section is largely cosmetic in terms of explanatory frameworks. To better determine the worthiness of the accommodationist thesis asserted by some evolutionary biologists and organizations requires looking at an important nuance regarding the difference between scientific and religious explanations. While science and religion seek causal understanding of natural phenomena, science attaches to that notion the view that such understanding, in the form of theories and hypotheses, should be continually open to empirical scrutiny, and updating or replacement as required. It is the view that scientific inquiry and attendant understanding is always fallible. The dynamic nature of understanding that has developed in the sciences is consistent with the very nature of human inquisitiveness. Even from an evolutionary perspective, having a constant desire to push the bounds of inquiry can be seen as having the selective advantage of enhancing one’s ability to comprehend and manipulate their surroundings, and anticipate future consequences. Religion on the other hand, in the context of resorting to the supernatural as the relevant causal realm, will provide one with a level of immediate understanding that cannot be enhanced beyond the scope of accepting ‘on faith’ a particular theory or hypothesis of a causal relation involving supernatural entities. The consequence is that the standards for causal inquiry in the sciences are significantly different from those in religion. Science requires that theories and hypotheses be available to at least potential, critical and empirical evaluation. Theories present general cause-effect relations, and hypotheses offer specific, spatio-temporally localized explanatory accounts (Hull 1974; Fitzhugh 2008a, 2010). For either construct in the sciences, it is the fact that empirical causes are invoked that allows for confirming or disconfirming evidence to be sought in the process of evaluation. The difficulty faced by theories and associated hypotheses of the supernatural is that the evidence required for their assessment per the standards in the sciences would not be available. Our perceptual abilities are only able to register empirical phenomena as the rational means to critically evaluate competing theories and hypotheses. As outlined by Dawes (2009), the standards, what he calls “explanatory virtues,” for evaluating the comparative utility of theories and hypotheses include the following:

[1] • testability
• simplicity
• consistency with background knowledge
• ontological economy
• previous explanatory success of the type under consideration
• informativeness

These criteria can be applied to supernatural and natural theories and hypotheses competing to causally account for the (natural) phenomena we encounter. As testability is regarded as the most important of these virtues, it will be given consideration below. Problems for accommodationism loom large.

The perception of surprising or unexpected effects leads to asking causal questions of the form, “Why y, in contrast to x?” (Salmon 1984b, 1989; Sober 1986, 1994; van Fraassen 1990; Lipton 2004; Fitzhugh 2006a, 2006b, 2006c, 2008b, 2006c, 2009). In other words, the question is asked because observed effects of type y were not anticipated, thus not already part of some expected explanatory framework that
has already been applied to effects of type \( x \). The mode of reasoning employed to provide at least a tentative answer to the question is known as *abductive inference*, or *abduction* (*sensu* Peirce 1878, 1931-1935, 1958; Hanson 1958; Harman 1965; Achinstein 1970; Fann 1970; Reilly 1970; Curd 1980; Nickles 1980; Thagard 1988; Ben-Menahem 1990; Lipton 2004; Josephson & Josephson 1994; McMullin 1995; Hacking 2001; Magnani 2001; Douven 2002; Psillos 2002; Godfrey-Smith 2003; Walton 2004; Aliseda 2006; see Fitzhugh 2005a, 2005b, 2006a, 2006b, 2006c, 2008a, 2008b, 2008c, 2009, 2010 for considerations of abduction in relation to biological systematics and evolutionary biology). While logic texts tend to segregate reasoning under the headings of deduction and induction (Salmon 1967, 1984b; Copi & Cohen 1998), where any form of reasoning that does not conform to the rules of deduction is by default inductive, there has been a movement since the 19th century to recognize that inquiry requires a more nuanced approach. At a minimum, scientific inquiry involves the following actions subsequent to the formulations of causal questions (Peirce 1878, 1931-1935, 1958; Fitzhugh 2006a, 2008a, 2010): (1) inference of a tentative explanatory hypothesis; (2) predicting consequences (potential test evidence) from that hypothesis that should be observed given the truth of the causal conditions presented in the hypothesis; and (3) putting oneself, as the act of testing, in a position to witness the conditions that allow for observing whether or not predicted consequences derived from (2) are manifested or not. The mode of reasoning involved in (1) is abductive, that in (2) deductive, while (3) is inductive *sensu stricto*. For the present discussion, the pertinent class of reasoning is abduction, but the potential to engage in actual hypothesis or theory testing will also be shown to have significant consequences for accommodationism.

We can represent abductive inference [action (1) above] by the following schematic form:

[2]  
- Auxiliary theory(ies)  
- Theory \( X \): if cause \( x \) occurs, effect \( y \) will ensue  
- Surprising effects \( e_y \) are observed  
- Hypothesis \( h_x \) – cause \( x \) occurred.

The double line separating the premises from the conclusion indicates that the inference is non-deductive; a single line denotes deduction. The inferences leading to potential test consequences (deduction) and the act of testing the hypothesis (induction) inferred in [2] would have the respective forms:

[3]  
- Auxiliary theory(ies)  
- Theory \( X \): if cause \( x \) occurs, effect \( y \) will ensue  
- Given hypothesis \( h_x \) – that cause \( x \) occurred  
- Proposed conditions to carry out test  
- Effects originally prompting \( h_x \)  

\[\text{Predicted test evidence, i.e., independent effects associated as Narrowly as possible with conditions Outlined in } h_x \text{ should be observed.}\]
• Auxiliary theory(ies)

• Theory(ies) relevant to original effects

• Test conditions \(a, b, c, \ldots\) established

• Predicted subsidiary effects are observed/not observed

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• Hypothesis \(h_x\) is confirmed/disconfirmed.

What [2] represents is that, as a consequence of observing effects \(e_y\), one applies theory \(X\) to infer that \(e_y\) are consequences of some set of past causal conditions that are consistent with \(X\). Note that abduction relies on the assumption that one is applying some previously accepted theory to effects. In the context of a field such as evolutionary biology, relevant theories would be ones that have successfully withstood past testing. Note that the act of hypothesis testing, i.e. [4], imposes specific requirements, the most important of which is that one have the opportunity to witness test conditions that provide confirming or disconfirming test evidence.

Are we in a position to legitimately test a hypothesis that relies upon a supernatural theory? This question presumes that one has already successful tested the previously accepted theory used to both infer the hypothesis in the first place and will play a role in the subsequent testing of that hypothesis. While the process of theory testing has a form similar to hypothesis testing in [4], there are fundamental differences. Recall that a theory asserts general cause-effect relations. In order to test a theory, one must develop the relevant experiment (= test) that allows the investigator to control as much as possible conditions under which the cause is manifested in order to minimize the chances of receiving spurious effects. In other words, one attempts to minimize the possibilities of incurring effects that lead to ‘false positive’ or ‘false negative’ conclusions. The test of a theory has the following schematic form:

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• auxiliary hypotheses/theories

• theory \(T\) to be tested – given causal condition \(x\), effect \(y\) will ensue

• experimental (= test) conditions \(a, b, c, \ldots n\) are established at time \(t_i\), with causal event \(x\) observed to take place

• effect of predicted type \(y\) is subsequently observed at \(t_{i+n}\)

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• theory \(T\) is supported/confirmed.

What is apparent is that engaging in the testing of a supernatural theory would neither be straightforward nor likely. If such a theory asserts that particular supernatural causes are at hand, an investigator, who is by definition limited to interacting with natural phenomena, is immediately precluded from either having any perceptual experience of the causal agent or manipulating conditions relative to that agent to minimize potentially spurious results. For all practical purposes, testing a supernatural theory is not possible, and in turn testing a hypothesis inferred from such a theory would not be possible since the test evidence for such hypotheses could only be natural, not supernatural. Note, however, that while a hypothesis inferred using a supernatural theory is incorrigible, this does not preclude entertaining alternative, natural hypotheses that are open to testing.
Weighing the explanatory virtues in [1] between supernatural and natural theories and hypotheses is a straightforward matter. A natural theory or hypothesis will have the benefit of at least potential testability, therefore greater simplicity, and thus more explanatory power relative to a supernatural theory or hypothesis (Dawes 2009).

At this point, we can identify abductive inferences that are strictly scientific/natural and religious/supernatural in their respective scopes. What Ruse (2008; quoted earlier) termed ‘independent.’ Inference of a natural hypothesis would have the form,

[6] * (Testable) auxiliary theories/hypotheses

* (Testable) scientific theory $T_n$: if (empirical) cause $x$ occurs, then (empirical) effect $y$ will ensue

* Observed effects $e_n$

* (Potentially testable) hypothesis $h_n$: event $x$ occurred in the past.

Inference of a supernatural hypothesis would have the form,

[7] * (Untestable) auxiliary theories/hypotheses

* (Untestable) supernatural theory $T_s$: if (non-empirical) cause $u$ occurs, then (non-empirical) effect $v$ will ensue

* (Unobservable) effects $e_s$

* (Untestable) hypothesis $h_s$: event $u$ occurred in the past.

Labeling of the premises and conclusion ‘untestable’ in [7] is relative to an observer in the natural realm (cf. [4]).

While a contrived example, it is significant to notice that supernatural theories and associated hypotheses of the type shown in [7] only apply to non-empirical effects. As such effects are phenomena that not only lie beyond our perceptual abilities, and are causally accounted for by theories that cannot be empirically tested, the utility of such inferences for our purposes is obviated. At best, the inference in [7] would only be relevant to a supernatural being that can perceive supernatural causes and effects.

In one sense, [6] and [7] are compatible in that both strive for causal understanding. But the two inferences are incompatible from the perspective that the scientist is only allowed empirical access to [6] and precluded critiquing premises or conclusion in [7], per the tenets of scientific inquiry. This acknowledges the respective limitations on both classes of inquiry if [6] and [7] were consistently practiced. The accommodationist, however, insists there is the alternative where one can indeed implement [6] and a form of [7] to observed effects. Claiming science and religion are not at odds with one another with respect to explanation carries with it the implication that one is able to arbitrarily forgo empirical theories in lieu of supernatural theories in the act of inferring explanatory hypotheses for natural phenomena. Contra [6] and [7], the following inferential form would then be warranted by the accommodationist:
The alternative premises in [8] are necessitated for the accommodationist to claim science and religion ‘compatible.’ But this presents four distinct predicaments. First, one must be willing to not only accept empirical theories that have survived past critical evaluation, but also arbitrarily interject untestable, supernatural theories to explain empirical phenomena. Second, at the point methodological naturalism (cf. Boudry et al. 2010) is waived for explaining a particular instance, one has to accept that the cause-effect relations in successfully tested theories can be both violated and ignored in lieu of invoking supernatural theories. But as any supernatural theory is not available to being critically evaluated, one puts them self in the position of accepting a contradiction. The contradiction is incurred because the introduction of supernatural theories to explain empirical phenomena will result in one having to suspend application of one or more accepted empirical theories. Third, the arbitrary dismissal of empirical theories for supernatural will be by definition maximally irrational. No amount of empirical justification can be brought to bear on the situation. And fourth, the greatest problem with the contradiction to scientific practice in [8] is that it impedes the continued, critical acquisition of causal understanding over time. In point of fact, the accommodationist thesis is indefensible since supernatural theories are operationally immune to testing. The only option for resolution, if one wishes to minimize irrational understanding as well as ensure increased understanding into the future, would be to forgo supernatural theories altogether when causally considering natural phenomena.

Conclusion – The Price of Compatibility

Differential utilization of scientific (potentially testable/successfully tested) and supernatural theories and hypotheses (cf. [8]) will inevitably lead one to a position of causal understanding that is incompatible with the goal of scientific inquiry. As such, the only way for science and religion to hold respective positions that are complimentary is if their explanatory realms are wholly separate from one another with respect to empirical and non-empirical phenomena. The abductive inferences using scientific or religious theories in [6] and [7], respectively, stand as separate enterprises, as summarized in Figure 1A. In other words, supernatural theories and hypotheses apply to non-empirical effects ([7]), and empirical theories and hypotheses are the only rational options accounting for natural effects ([6]). The two classes of abductive inference are, in this instance, complimentary for they pertain to their respective explanatory
To claim, as accommodationists have, that science and religion are compatible neglects to make this strong distinction. The consequence is that accommodationism leaves open the option for considering supernatural theories as having explanatory relevance for whatever empirical phenomena one chooses to explain (cf. quotes from Ayala 2006, 2007 above) – a decision-making process that is at best arbitrary and at worst irrational. Asserting compatibility of the form in [8] will ultimately lead to a contradiction with the accepted tenets of scientific inquiry, as summarized in Figure 1B (cf. [1], [6], [7]). The contradiction is for the fact that one must assume that accepted scientific theories can be circumvented for the sake of invoking supernatural theories that are beyond reproach.

A prominent recent attempt to endorse science–religion compatibility has been the essay by Gould (1999: 56, 58, emphasis original), where he presented his “nonoverlapping magisteria (NOMA)” of science and religion:

“The lack of conflict between science and religion arises from a lack of overlap between their respective domains of professional expertise – science in the
empirical constitution of the universe, and religion in the search for proper ethical values and the spiritual meaning of our lives....

The net of science covers the empirical universe: what is it made of (fact) and why does it work this way (theory). The net of religion extends over questions of moral meaning and value. These two magisteria do not overlap, nor do they encompass all inquiry (consider... the magisterium of art and the meaning of beauty).”

Although Gould (1999: 58) acknowledges that these NOMA “bump right up against each other,” the manner in which he characterizes their functions in human actions clearly shows that there is overlap of the form described in [8] (Fig. 1B). For instance, to speak of “ethical values and the spiritual meaning of our lives” and “questions of moral meaning and value” (see also Ayala 2006, 2007) is to refer to actions among humans – actions that occur in the realm of the natural, and as such are empirically open to investigation and explanation by scientific inquiry. If religion is to explain these actions in the context of a supernatural agent as the relevant causal factor, then the NOMA principal has been violated. The only way to say there is no conflict, thus compatibility and no contradiction with scientific practice, is to settle for the relations in Figure 1A (cf. [6], [7]), which is not what Gould intended as a solution.

Like Gould (1999), Kurtz (2002) sees science and religion as compatible. But, Kurtz’s reasoning does not suffer the defect of Gould’s and Ayala’s position of allowing religion qua the supernatural to lay causal claim on certain aspects of the human condition. Rather, Kurtz is clear in his conception of religion as being distilled down to the products of human thought. That is, religions are consequences of natural phenomena, in the same vein as discussed earlier with regard to Dow’s (2007) definition of religion (see also Wilson 1978; Dennett 2006; Ruse 2009; Thagard 2010; Thompson & Aukofer 2011). In his rendition, Kurtz (2002: 44) places religion squarely in the realm of reasoning shown in [6] and the right half of Figure 1A:

“...religious systems of belief, thought, emotion, and attitude are products of the creative human imagination. They traffic in fantasy and fiction, taking the promises of long-forgotten historical figures and endowing them with eternal cosmic significance.”

Claiming science and religion are compatible implies two contrary extremes. At one extreme, the empirical and non-empirical can be interwoven to the extent one desires, as shown in [8] (Fig. 1B). At the other extreme, all facets of understanding can only be attained by way of empirical, (potentially) testable causes, sensu [1]: we must remain agnostic to the goings on in any causal realm beyond the natural. This latter extreme would encompass the respective realms depicted in [6] and [7] (Fig. 1A). Given the rules for conducting scientific inquiry, especially that we pursue causal understanding of natural phenomena by way of testable theories and hypotheses, there could be no allowance for the accommodationist view that science and religion are either not in conflict or are compatible. To make an assertion of non-conflict or compatibility is to misrepresent the very foundations of how science is presently conceived.

Stating that science and religion are incompatible as explanatory options is not
an indictment against either enterprise or the practice of both by an individual. There are no rules of logic that demand that considerations of the supernatural as a causal factor relative to natural phenomena be precluded, or that only natural causes can be entertained. But within the purview of logic, scientific inquiry is a rational process – one that requires presenting and assessing relevant evidence associated with specific claims. The point of this essay is that science only deals with empirically accessible causation while religion affords one opportunities to deal with both non-empirical and empirical causes in the name of explaining empirical phenomena. That one can seek causal understanding utilizing supernatural in lieu of natural theories and hypotheses is a matter of personal choice. But in making that choice, practitioners must acknowledge that it will be one that is less than minimally irrational in the extreme and at odds with established scientific practice. It is for this reason that the demand for methodological naturalism in science, to which end the goal is the continual increase in causal understanding by way of empirical evaluation, is not compatible with what is allowed according to religious causal understanding. To claim otherwise is to misrepresent science – the essence of the error committed by the accommodationist agenda.

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References


