Pragmatic Faith in Science and Religion: A Response to New Atheism

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Abstract

It is a cliché to say science and religion are antagonistic. The outlook is often promoted by religious people uneducated in the workings of science, and equally by scientifically-oriented individuals with little experience of religion. This essay challenges presumptions about the irreconcilability of science and religion, focusing on action organizing metaphysical principles infusing both. The aim, however, is not to evaluate proofs for God's existence, nor defend young earth creationism, nor the notion that there is one true religion, nor still the thesis that morality demands divine guidance – all positions that critics commonly raise to demonstrate the stupidity of religion, even though such views are hardly universal among theists. The aim is instead to expand what one can rationally accept, leaving it to individuals to decide what to believe. Central to my arguments is the concept of pragmatic faith. The notion holds that willingness to act measures strength of conviction and that actions generate empirical results that may either verify or disconfirm what was initially held without adequate evidence. Such a stance is a necessary ingredient in both scientific and spiritual activities, suggesting a rebuttal to New Atheists, who narrowly identify religion with superstitious irrationality.

Keywords

Faith; New Atheism; Pragmatism; Religion; Science.

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Resumo

É um lugar comum dizer que ciência e religião são antagónicas. Esta perspectiva é frequentemente promovida por pessoas religiosas sem conhecimento do funcionamento da ciência, e igualmente por indivíduos orientados para a ciência e com pouca experiência em religião. Este ensaio desafia pressupostos sobre a irreconciliabilidade entre ciência e religião, com foco na ação que organiza os princípios metafísicos que infundem ambas. O objetivo, no entanto, não é avaliar as provas da existência de Deus, nem defender o criacionismo da terra jovem, nem a noção de que existe uma religião verdadeira, nem a tese de que a moralidade exige orientação divina – todas essas posições que os críticos costumam usar para demonstrar a estupidez da religião, embora essas posições não sejam universalmente aceites entre os teístas. Em vez disso, o objetivo é elaborar o que se pode aceitar racionalmente, deixando aos indivíduos decidirem em que acreditar. O meu argumento principal é o conceito de fé pragmática, a ideia de que a vontade de agir mede a força da convicção e que as ações geram resultados empíricos que podem confirmar ou desprovar o que foi inicialmente mantido sem evidência adequada. Tal postura é um ingrediente necessário nas atividades científicas e espirituais, sugerindo uma refutação dos novos ateus, que identificam estreitamente a religião com irracionalidade supersticiosa.

Palavras-chave

Fé; novo ateísmo; pragmatismo; religião; ciência.

Introduction

It is a cliché to say science and religion are antagonistic. The outlook is often promulgated by religious people uneducated in the workings of science, and equally by scientifically-oriented individuals with little experience of religion. This essay counters purported enmity between scientific and religious frameworks by identifying similar action organizing metaphysical principles that infuse each.

It should be stated up front that I have no interest in evaluating proofs for God's existence, or defending young earth creationism, or championing the notion that there is one true religion, nor still the thesis that morality demands divine guidance – all positions

commonly cited to show the stupidity of religion, even though they are hardly universal among theists.[1] More broadly, I will not insinuate what we should believe. Instead, my goal is to expand the range of what we can accept with rational warrant, leaving it to each to decide what stances to adopt. I accordingly have no beef with either atheist or theists. I do, however, target views circulating in New Atheist quarters that narrowly – and I will argue incorrectly – identify religion with superstitious nonsense: a scourge and illness to be cured through rational interventions.

Scientific and Religious Belief in the Unseen

A standard objection that critics of theism raise – and often quite fairly – is that religious practitioners frame claims such that they are beyond empirical testing. Carl Sagan demonstrates when he asks us to suppose someone proclaims a dragon lives in their garage. The person goes on to say that we cannot see the dragon because it is invisible; we cannot trace its footsteps because it floats; we cannot reveal the dragon by spray painting it because its immaterial form does not bind with chemical substances; we cannot detect its fiery breath with infrared sensors because the flames are heatless. In short, there is no possible test that could affirm or refute the existence of the dragon, [2] and critics of theism argue the same for God and other religious claims.[3]

The scenario detailed in the dragon parable gets close to what the pragmatic philosopher William James – who will be a companion throughout this piece – called "halfway empiricism." Halfway empiricism – which, by definition, is anti-pluralistic – characterizes a position that would reject observations contesting a cherished stance on the grounds that the data must be mistaken.[4] Interestingly, the tendency pervades the sciences. Occasionally it occurs on the level of specific hypotheses, as with a recent author rejecting the existence of plant minds by stipulating that psychic life necessitates internal representations,[5] effectively discounting cognitively and perceptually rich capacities identified in plants.[6] More often scientifically-oriented individuals fall into halfway

[1] See generally Hitchens, Dawkins, Harris and Dennett (2019).
[2] Sagan (1995), p. 160.
[3] For example, Dawkins (2006), Ch. 2; Russel (1952), p. 543-548.
[4] see James (1897a), p. 447
[5] Maher (2019).
[6] For example, Trewavas (2014).

empiricism at the level of metaphysical positions they adopt as starting points. Consider the notion that nature is lawlike, otherwise known as the principle of uniformity. Scientists invariably take this to imply that nature is mathematizable, whether in terms of absolutely predictable outcomes or statistical probabilities. With this metaphysical outlook as a starting point, random results are almost never taken as showing that a phenomenon is purely haphazard; even if replicated, they are rarely published, unless perhaps contesting an established result. Having such biasing limits in place, it may be that conceptions of the lawlike nature of the universe are exaggerated, and insofar as mathematizable realities become the only ones entering thought, the resulting view is also anti-pluralistic.

Closely related to lawlike notions of the universe is the conclusion that the future will resemble the past. Such a supposition undergirds induction: the principle whereby we generalize, say, that because this medication worked on this group of people, it will have the same effect on the population at large, which is necessarily a projection that future cases will resemble the current one. Empirical verification of the inductive principle itself might be attempted by sampling earlier instances, and seeing whether the future resembles the past in these cases. The problem is that generalizing the future validity of induction would require assuming the very principle we are attempting to verify.[7] Notice, then, that the principle of induction and broader mathematical ontologies are not adopted by scientists because of empirical evidence, but regardless of it. When it comes specifically to the principle of uniformity, the vision is so engrained that most scientists deem contradicting evidence – when it arises in the form of haphazard findings – as mistaken. That is, such evidence is taken to indicate that one is not looking hard enough or in the right places, in short, that things must be different than they empirically appear in observation.

Sam Harris – a figurehead in the New Atheist movement in company with Richard Dawkins, Daniel Dennett and Christopher Hitchens – notes that the New Testament defines faith as "the assurance of things hoped for, the conviction of things not seen,"[8] an idea repeated in other religious texts such as the Qur'an.[9] Harris goes on

[7] Hume (1740), Book 1, Part 3, Sect. VI
[8] Hebrews 11:1, Revised Standard Version.
[9] For example, 2:3.

to say that the quoted New Testament passage, if "read in the right way," will "render faith entirely self-justifying."[10] Specifically, he argues that "the very fact that one believes in something which has not yet come to pass ('things hoped for') or for which one has no evidence ('things not seen')" is taken as spurious "evidence for its actuality ('assurance')."[11] There is an element of truth in Harris's assessment, as we shall see, but also a failure to recognize pragmatic implications that apply equally to science and religion.

James, for example, considers the principle of uniformity to be "far more like a religious faith than like assent to a demonstration."[12] He arrives at a similar conclusion about the notion that all changes have causes, a principle widely held by scientists, even if it gets a little murky in quantum mechanics. Here, too, scientists do not properly observe causes, but instead successions of phenomena, with some elements consistently preceded and hence "caused" by others.[13] However, the principle of causality and indeed the concept of "cause" demand a "deeper sort of inward connection between phenomena than their merely habitual time-sequence. ... The word 'cause' is, in short, an altar to an unknown god; an empty pedestal still marking the place of a hoped-for statue."[14] These words are partly drawn from the New Testament, which mentions an altar to an unknown god,[15] and James argues that science requires faith in things not seen.

There are a number of ways in which this is so. First, science sometimes progresses "by ignoring conditions which are always present."[16] This occurred when Galileo grasped kinematic motion by envisaging marbles rolling over nonexistent frictionless surfaces, and Isaac Newton conceived his laws by reducing celestial bodies to point-like objects. Second and as already intimated, science depends on faith in the unseen insofar as science accepts empirically unverifiable metaphysical principals. But while profoundly unempirical, such metaphysical attitudes are pragmatically justified insofar as they lead to actions that promote certain empirical domains of inquiry. For instance, positing material causes for cancer is a preliminary step in getting to the difficult

[10] Harris (2004), p. 64.
[11] Harris (2004), p. 64.
[12] James (1890), p. 637.
[13] Hume (1740), Book 1, Part 3, Sect. II.
[14] James (1890), p. 671
[15] Acts 17:23.
[16] James (1890), p. 636

task of understanding it and discovering treatments, and is accordingly pragmatically justified within the field of oncology.

Scientific objections to religious stances, then, cannot be substantiated on the mere basis that the latter entail belief in the unseen – at least, not without seriously jeopardizing science. However, the complaint might be justified if it turned out that religious faith lacks the knowledge expanding and life bettering potential that scientific varieties possess. A pertinent question, therefore, is whether religious conviction in the unseen similarly bears concrete fruit. If so, then it may be that New Atheists in the vein of Harris are too quick to dismiss it.

Faithful Belief as Action

Faith and belief, according to James, organize action. James thus identifies both with action, arguing "the test of belief is willingness to act,"[17] and that "there is some believing tendency wherever there is willingness to act at all."[18] He means not only that action measures conviction, but also that faithful belief functions to facilitate action. When wavering between contradictory options, unsure what to believe, one hesitates to act, especially if moving forward carries momentous consequences. With strong commitment, however, "inwardly stable" conviction – or faithful belief – arises, and "fills the mind solidly to the exclusion of contradictory ideas. When this is the case, motor effects are apt to follow."[19] On the grounds that beliefs enable and guide action, James proposes that the truth of a belief "is not a stagnant property," but something that happens through "a process of valid-*ation*,"[20] or what might alternatively be called valid-action. The insight gets close to the phenomenological notion of truth as unveiling or revelation engendered through action, that is, as a kind of poetic twisting of reality that brings forth heretofore unseen dimensions. [21] Belief in atomic particles, for instance, has generated fruitful experimentation and theorizing that has opened us to heretofore unseen realities. Hence it has led scientists to act in ways advancing their field. So long as

[17] James (1882), p. 70.
[18] James (1896), p. 458.
[19] James (1890), p. 283.
[20] James (1907), P. 574.
[21] See Heidegger (1960), p. 17-86.

the belief continues to reliably cultivate beneficial or "valid" actions, scientists are apt to continue trusting it.

Based on the intimate connection between action and belief, it seems to follow we can will ourselves into belief by acting as if the thing in question were real, but this does not merely mean we can convince ourselves on a psychological level; it means also that actions can generate phenomena and hence experiences or data that support our belief. [22] In science this is easy to see. Using particle accelerators to create non-naturally occurring exotic elements is one example of acting to generate phenomena verifying specific standpoints. Comparable outcomes occur in everyday life. A woman who acts on the belief – or has faith – that she is not, after all, too sick for kick boxing practice effectively eliminates a symptom and experiential basis upon which she judged herself so very ill in the first place. For James, "faith" means believing what might well be doubted: "as the test of belief is willingness to act, one may say that faith is the readiness to act in a cause the prosperous issue of which is not certified to us in advance."[23] Put otherwise, "faith is synonymous with working hypothesis" – "working" in the double sense of being unverified and of being a way of working or acting in the world.[24]

In the same way that nature would hide many of her secrets from scientists if they did not act on certain unverifiable metaphysical principles, one can speculate the divine does the same for unbelievers. Regarding science, James writes:

Without an imperious inner demand on our part for ideal logical and mathematical harmonies, we should never have attained to proving that such harmonies lie hidden between all the chinks and interstices of the crude natural world. Hardly a law has been established in science, hardly a fact ascertained, which was not first sought after, often with sweat and blood, to gratify an inner need. Whence such needs come from we do not know: we find them in us, and biological psychology so far only classes them with Darwin's "accidental variations."[25]

Of religious inclinations, James goes on to say that

[22] James (1890), p. 321.
[23] James (1882), p. 70.
[24] James (1882), p. 73.
[25] James (1895), p. 497-498.

> the inner need of believing that this world of nature is a sign of something more spiritual and eternal than itself is just as strong and authoritative in those who feel it, as the inner need of uniform laws of causation ever can be in a professionally scientific head. The toil of many generations has proved the latter need prophetic. Why may not the former one be prophetic, too? And if needs of ours outrun the visible universe, why may not that be a sign that an invisible universe is there?[26]

It may be that the divine does not show itself clearly because our minds are closed and our attention selectively misdirected from indications of spiritual presence. Or it may be that doubt prevents personal acquaintance with spiritual realities much as inordinate mistrust prevents people from forging social ties.[27] But whatever the case, it may be that "our faith beforehand in an uncertified result is the only thing that makes the result come true."[28]

In mocking the earlier cited New Testament passage on faith, Harris unwittingly constructs an illustration that – with slight adjustment – reinforces just this point. Harris sarcastically talks about feeling

> a certain, rather thrilling 'conviction' that Nicole Kidman is in love with me. As we have never met, my feeling is my only evidence of her infatuation. I reason thus: my feelings suggest that Nicole and I must have a special, even metaphysical, connection – otherwise, how could I have this feeling in the first place? I decide to set up camp outside her house to make the necessary introductions; clearly, this sort of faith is a tricky business.[29]

This creepy parable is a strawmen example, so let us slightly modify it. Suppose Jill has a crush on her classmate Jack. If Jill gets evidence that Jack dislikes her, then we can agree that Jill should back off. But if evidence is neutral, then the better part of reason may be to act on the assumption that the thing Jill wants to believe is true. Notice this means putting the belief to the test, and risking it. So maybe Jill will ask if Jack wants to meet some time to go over class notes. If he emphatically says no, then Jill has evidence Jack is not into her. He also may say yes, but just be interested in friendship. But over time he may come to appreciate Jill romantically (or not); or maybe Jill discovers he loves

[26] James (1895), p. 498.
[27] James (1896), p. 476.
[28] James (1895), p. 500.
[29] Harris (2004), p. 64.

her from the very beginning. The point is that if nobody takes a small leap of faith, nothing happens, and further that by taking the small leap, Jill may actually generate the reality she wants to be true, as in the case of Jack first only liking her as a friend, but then, through further acquaintance, growing to developed feelings.

Roughly speaking, science mirrors the Jack and Jill example insofar as beliefs generate actions, which engender empirical results. Thus even scientific facts are products of human action, as when researchers either make light manifest as a wave or particle depending on whether experiments are set up on the assumption of the former or latter. As the physicist David Finkelstein puts it polemically, it is as if we have entered an age of "non-objective physics." [30] Werner Heisenberg pioneered "quantum theory in the same city and decade in which Kandinsky coined the phrase 'non-objective art'," and one may speculate he "borrowed from Kandinsky when he called quantum theory 'non-objective physics.'"[31] Whereas "classical physics ... represses the observer and the *act* of observation and talks naively about 'things as they are'," a "main idea of quantum theory is to talk about *what you do*, not about 'things as they are'."[32]

A commonality between everyday, scientific and religious leaps of faith, therefore, is that all can actualize certain heretofore unrealized outcomes. It is a trope in the New Testament that faith can move mountains,[33] and this is repeated by religious sages such as Mahatma Gandhi.[34] The theme reoccurs in a Taoist text, where an old man wants to move mountains to make way for a road. When chastised about the near impossibility of the task, he replies: "My descendants will go on forever, but the mountains will get no bigger. Why should there be any difficulty about levelling it?"[35] This gets straight to the pragmatic point: we can literally move mountains if we work long enough, or end world poverty, or vanquish the British Empire as Indians did through years of collective peaceful resistance. We have put humans on the Moon, and might end HIV without a vaccine, bringing about its gradual demise by ensuring clean needles and widespread condom use, though this is not to blame the afflicted. On a more immediate level, you

[30] Finkelstein (2004), p. 182.
[31] Finkelstein (2004), p. 182.
[32] Finkelstein (2004), p. 182, emphasis added.
[33] For example, Mark 11:23, Matthew 17:20, Matthew 21:21, 1 Corinthians 13:2.
[34] Gandhi (1925), p. 331.
[35] The Book of Lieh-tzu, p. 100

might pray for the alleviation of the poor, and then hear an internal voice saying, "You can do something about that," and act accordingly. In this case, your actions answered your prayer, realizing its hopes. Faith, then, is essential in science, religion and everyday life. It is essential because it is a preliminary condition of realizing what was initially taken on faith insofar as it helps make the thing believed come into reality, therefore making it true.

More Commonalities between Scientific and Religious Faith

Related to the forgoing notions of faith is the idea that evidence is never enough to determine absolutely that something is true, though we can be extraordinarily certain. The view is widely shared by scientists and taught in introductory research methods classes. The notion is also carried in James's theory of mind and knowledge, which assimilates evolution by natural selection. [36] James vehemently supports the theory, lauding the Darwinian precept that evolution requires two independent cycles of operation.[37] The first cycle is one in which variations arise that are random in regard to whether they are adaptive. The second is the process by which environmental pressures and consequential reproductive success or failure either lead the variation to be propagated or extinguished over time. James conjectures the mind works the same way: that the unstable brain sometimes generates ideas that are either reinforced or extinguished depending on how well they work in our environment. He also holds the environment supplies sensory variation, which impacts us more or less depending on what our interests bring to attention. In either case, the environment does not impress ideas on us in a one-to-one manner, and data is always inadequate for forming absolute judgments.[38]

James suggests, therefore, that we often have to make decisions on the basis of emotion. After all, to say in the absence of adequate evidence, "'Do not decide, but leave the question open,' is itself a passional decision" – that is, a decision based on inclination, not evidence.[39] If delayed decision does not have significant costs; or if going forward

[36] See James (1880); James (1890), Ch. 28.
[37] James (1880), p. 622.
[38] See Crippen (2018).
[39] James (1896), 464.

has enormous risks, then we may be inclined to sit back and wait. Yet if longing for something "hoped for," as the earlier quoted New Testament passage puts it, and if there is no strong evidence that our desire is unobtainable, then moving forward may be the better part of wisdom. The Jack and Jill example is one case in point. Another might be a scientist embracing HIV research in the 1980s. In both cases, the emotional hope – or faith – that things might work out favorably is part of what sustains action.

Another commonality between scientific and religious faith is that it keeps people going in tough times. Think about the lack of progress in many studies, and compare it to everyday life to see how much faith science requires. If Jill had been asking Jack out unsuccessfully for even a year, she would give up, unless possessed by an unhealthy obsession. But scientists keep going even after years of failure, as in the case of Kepler, and even Jill's persistence after a few disappointments may eventually be rewarded. There are no shortage of religious parables demonstrating a comparable point, such as the Israelites' 40-year flight from Egypt to the Promised Land. Even if one rejects the veracity of religious stories, we can imagine and typically know someone who has gotten through difficult times aided by faith.

A last commonality between scientific and religious faith is that both are experienced as lived realities. Recall, again, that quite a bit resists the metaphysical notion that the universe is lawlike. Scientists see all sorts of things that seem haphazard, just as we sometimes observe human behaviors that appear random, but this rarely shakes faith that there must be underlying laws or causes at play. The sense that the universe is causally lawlike is enhanced further by the fact that random, chaotic results are almost never published in scientific journals, so that mathematization has become a gold-seal of what counts as "science." The principles of uniformity and causality accordingly weave so thoroughly into the world lived by most scientists that many are wont to see them as realities infusing nearly everything. Further, acting faithfully on these principles has fruitfully generated outcomes and realized truths that otherwise would not have come into existence, thereby supplying pragmatic justification for adopting them. Religious belief may similarly be fruitful for many, engendering actions that disclose spiritual insights. As with the principles of uniformity and causality, moreover, the divine may exert an organizing influence on the lived world of believers such that they similarly sense it in flowers and trees, in life and being – almost as plainly as one senses the blue of the

sky. An example tying scientific and religious forms of life together is the painstaking observations and roughly 20 years of mathematical labor driven by the search for God's perfection in the cosmos that yielded Johannes Kepler's laws of planetary motion.[40] It is not self-evidently obvious why it is rational to seek mathematical perfection but irrational to seek God's perfection, but more on this later.

Epistemologies of Faith

Based on the account so far offered, one can grant many central premises of New Atheists, but derive very different conclusions than they do. Take the notion of "memes," which Dawkins coins by combining "gene" with "mimema," Greek for "imitated."[41] Memes are units of cultural imitation, and Dawkins describes how beliefs, customs and other cultural "units" propagate. He models the account after his "selfish gene" theory. This is the idea that genes – and not individual organisms – constitute fundamental units of selection. If true, then genes do not necessarily propagate because they bestow adaptive advantages on organisms. Rather, natural selection favors genes good at getting replicated, and this can incidentally include those conferring advantages.[42] Transferring this precept to memes, Dawkins and others such as Dennett[43] suggest that beliefs need not be rational, true or helpful to spread; they need only have attributes that induce us to maintain and copy them. Dawkins cites Christianity as an illustration. It mollifies and thus proliferates through "psychological appeal."[44] It eulogizes "faith" and "blind trust," deterring tests that might damage its credibility.[45] It identifies belief with virtue.[46] It menaces doubters with "ghastly torments," intimidating them into belief,[47] though it is worth adding that not all Christians – much less all religions – advance a concept of hell. Christianity further protects itself by peddling the platitude that science cannot arbitrate

[40] See Hawking (2004), Ch. 3; Love (2009), p. 15-17.
[41] Dawkins (1976), p. 206.
[42] Dawkins (1976), p. 12. Dawkins's terminology is misleading insofar as genes do not have interests and therefore are not selfish. Culture likewise does not reduce easily to discrete gene-like units or memes. Dawkins (1976) acknowledges these shortcomings, but insists that he offers helpful metaphors in his terminology. In fact, his language is not really useful, but merely catchy or meme-like, though this is not to deny a number of worthwhile insights in his work.
[43] For example, Dennett (2006), Chs. 1 and 7.
[44] Dawkins (1976), p. 207.
[45] Dawkins (2006), p. 212.
[46] Dawkins (2006), p. 199
[47] Dawkins (1976), p. 212

religious doctrine.[48] Because of all this, Christianity nurtures cultural environments favoring its continuance.[49] So while Christian belief is, for Dawkins, false and harmful, it is also highly contagious.

To begin with, we can grant that psychological appeal – especially sentimental appeal – induces belief. Yet this is not particularly damning since emotions often push us to better beliefs, as when tension arising out of irrational inconsistency motivates resolution into rational consistency, experienced with feelings of pleasure and relief.[50] Emotions also help us parse the perceptual world.[51] James notes that concepts depend on emotional interests, so that a furniture maker might grasp oil as a wood darkener, compared to a mechanic regarding it primarily as a lubricant.[52] Notice that both ways of cognizing connect to actual properties of oil, so there is nothing irrational going on here. Dennett acknowledges that emotion can promote rationality,[53] but the other three leading New Atheists – Dawkins, Harris and Hitchens – do not seriously consider the possibility.

Emotions can simultaneously be less than rational. There is the emotionally charged supposition that Latinx migrants in the United States are dangerous, even though they are less likely to commit crimes than native-born residents.[54] There is also no shortage of prominent figures irrationally inflicting harm on others and themselves because of unchecked greed or sexual desire. And we all know what it is to have anger get the better of us. New Atheists seem to do just this at times, straying from reasoned discourse to irate diatribe and attempting to persuade by emotional appeal.

Christopher Cotter, for example, observes that New Atheists confront readers "with absurd and emotive analogies,"[55] such as Harris anticipating that future generations will regard faith without evidence with the same disgust that we reserve for slaveholders of the past.[56] Cotter further points out that despite evidence that global violence is at an

[48] Dawkins (2006), p. 54-61
[49] Dawkins (1976), p. 212-213; Dawkins (2006), p. 197-199.
[50] James (1879), p. 950-956.
[51] See Crippen (2018); Crippen (2019a).
[52] James (1879), p. 952
[53] Dennett (2006), Ch. 7.
[54] Landgrave and Nowrasteh (2017).
[55] Cotter (2017), p. 46
[56] Harris (2006), p. 48-49

all-time low, New Atheists stress religious adherents who lie and kill,[57] plan destruction,[58] and eagerly anticipate the end of the world.[59] Such attitudes are indeed held by some devotees, but hardly the majority. Dawkins likes to emphasize that Nobel Laureates are overwhelmingly atheistic and that theists are stupider than average. [60] He does grant many of history's great scientists were religious.[61] This includes, for example, Newton and Kepler. It also includes the cofounder of evolution by natural selection Alfred Russel Wallace, along with Georges Lemaître, the Catholic priest who first proposed what came to be known as the Big Bang theory. However, Dawkins dismisses religious affiliation in such cases on the grounds that scientists were just adhering to the cultural prescriptions of their times,[62] neglecting that today's practitioners do likewise within the anti-theistic norms of academia. Dawkins and Hitchens speculate that such intellectuals were perhaps secretly irreligious.[63] Nothing really follows one way or the other out of scientists' past or present religious dispositions. What is clear is that New Atheists are guilty of confirmation bias and deploying emotional appeal by suggesting that one is foolish if still clinging to religious conviction today.

Irrational tendencies aside, the fact remains that emotional capacities typically integrate fruitfully with action, cognition and perception. Thus we often experience anger as a rational self-defense mechanism, whether when dealing with someone trying to cheat or hurt us, or responding to social injustice. Bad air in overcrowded subways likewise induces anxiety, as does logical inconsistency, and this weighs into decision making and action. We experience healthy physical attraction and gravitate towards nourishing foods, even if evolutionary time lag leads to sexual excess or disposes us overmuch towards salt, fat and sugar – a predilection that was beneficial in past conditions of scarcity. While reason similarly serves us much of the time, it can be problematic – or in other words, cease to be reasonable – if emotionally insensitive, as when addressing a romantic dispute with a logically succinct email with an opening thesis, supporting points, and a conclusion. More formal examples come from research showing that brain damage

[57] Dennett (2006), p. 338; Harris (2004), p. 12.
[58] Hitchens (2007), p. 13
[59] Hitchens (2007), p. 56.
[60] Dawkins (2006), p. 97-103.
[61] Dawkins (2006), p. 97-99.
[62] Dawkins (2006), p. 97-98.
[63] Dawkins (2006), Ch. 2; Hitchens (2007), p. 254-255.

impeding emotional-visceral response augurs ruinous decision making and actions.[64] The take home point is that Dawkins is wrong to insinuate that the psychological appeal of belief implies its irrationality.

In identifying memes with religious belief, Dawkins suggests that theistic claims are not affirmed by what conventionally counts as evidence. Yet contra Dawkins, this does not translate into a refusal to test beliefs. Genuine faith, after all, entails life-altering commitment and hence modified actions. Actions, in turn, actualize realities and hence experiences that may buttress but also challenge the practical wisdom of what was initially taken on faith. Thus acting on faith means risking belief. Critically, moreover, we are rarely positioned to believe whatever we want because we cannot act however we want since the world supplies resistance. Thus while acting on faith allows us to move mountains in the earlier discussed senses, it leaves us unable to walk on water or see all the world's kingdoms from a high mountain, as Jesus was said to have done.[65] If working as a geologist or just interacting within educated circles, we may also find it difficult to act on the belief that the universe is 6000 years old. The point is that we test beliefs by acting on them; the world promotes and thwarts certain actions; it thereby generates evidence supporting or challenging certain beliefs, be they scientific or religious.

Another complaint carried in the meme critique of religion is that followers encourage devotion on the mere grounds that believing is the virtuous thing to do.[66] Though a legitimate concern, it is not unique to religion. Anticipating the position advanced by the four most prominent New Atheists,[67] James notes that one of his contemporaries "calls it 'guilt' and 'sin' to believe even the truth without 'scientific evidence.'"[68] Still another banal position that New Atheists reject is that science has nothing to say about religious claims. New Atheists finger multiculturalism, injunctions to be inoffensive and religious propaganda for this truism.[69] However, scientists adopting attitudes in the vein of New Atheism share blame by ridiculing serious investigation of religious claims, and thus scaring researchers from the pursuit, much as Dawkins claims

[64] For example, Damasio (1994), Chs. 3-4; Bechara, Damasio, Tranel and Damasio (1997), p. 1293-1295.
[65] See Mark 6:45-56; Matthew 4:8; Matthew 14:22-33
[66] For example, Dawkins (2006), p. 199; Hitchens, Dawkins, Harris and Dennett (2019), p. 54-57.
[67] See Hitchens, Dawkins, Harris and Dennett (2019), throughout.
[68] James (1982), p. 71
[69] See generally Hitchens, Dawkins, Harris and Dennett (2019).

fear of God frightens theists from religious heterodoxy. Scientists also flee from spiritual debates by retreating into halfway empiricism. For example, some presume that nature is exclusively mechanical, and consequently that alleged evidence for non-mechanical realities must always be incorrect. They accordingly maintain the position not because of evidence, but irrespective of it. Further, if spiritual phenomena are not amenable to mechanistic understandings, then they are precluded from consideration before even looking at evidence.

Throughout their writings, New Atheists further object that religious belief fosters environments favoring its own continuance. Once again, this is a general issue and not unique to religion. Thus while one presumes the leadership of the Democratic Party wants a more diverse, prosperous and inclusive America, and accordingly advocates fewer barriers to voting, education and immigration, these policies promote its continued existence. They do because people lacking ID, the better educated and recent immigrants all lean toward the Democratic Party. Republican policy goes in the opposite direction. For the sake of argument, charitably assume that this is because its leadership believes that showing ID may slightly reduce voter fraud, that less public funding for education preserves libertarian values and that reduced immigration protects jobs. However sincere these convictions may be, they unmistakably favor the Republican Party by disproportionately excluding those who would vote against it. Comparable trends occur in the sciences. For instance, behavioral scientists create laboratory environments that pace participants through structured tasks that limit responses to a finite number of discrete possibilities. By doing this, the laboratory environment corrals behaviors into orders that can be mathematically converted into generalizable cause-and-effect relations; and by consistently not publishing statistically random results, the academic environment does much the same. These procedures reflect faith in the principles of uniformity and causality, and they nurture outcomes conforming to them. James says that "our thoughts determine our acts," and "acts redetermine the ... nature of the world,"[70] and scientists act to perpetuate their own metaphysics.

A summative response to New Atheism can be found in the last paragraphs of James's posthumously published *Some Problems of Philosophy*. There, James invites us to call

[70] James (1909), p. 774.

upon faith not merely as an attitude that may be taken, but one that must be. In struggling with the question of what kinds of belief we ought to risk in a precarious world, James asserts there are four attitudes we can adopt. First, we can wait for evidence, and do nothing while waiting. Second, we can mistrust, and feeling certain things will fail, do nothing to prevent this from happening. Third, we can trust in spite of all the uncertainty, and take action to secure goals. Fourth, we can vacillate randomly between these various attitudes.[71] James reduces this list to two options. He rejects the fourth as "no systematic solution," and observes the first and second attitude are practically indistinguishable.[72] The basic choice, then, is between mistrust and trust – a dilemma James explains by way of analogy. When first meeting people, we can remain suspicious until evidence shows them trustworthy; or we can trust them until such a time – if it ever comes – that they prove untrustworthy. In either case, we initially act on beliefs lacking empirical justification, which is to say, we act on faith. If we assume that another is not trustworthy, and behave in a distant, suspicious manner, we are likely to provoke an unfriendly response that is consistent with the stance we initially took on faith. If assuming the obverse, chances increase that we will cultivate a warm trusting relationship. The choice, then, is not between faith and non-faith, but between two varieties of faith: one based on mistrust, the other on trust.

Of these two options, James thinks the second wiser. It is wiser because adopting trusting attitudes and believing what we desire is – if all else is equal – the more emotionally fulfilling option. As importantly, trust is likely to bring us closer to truth. Scientists often believe a theory before obtaining compelling evidence for it. Yet by trusting the theory – which here means acting on it – they may generate supporting evidence. They may also generate disconfirming evidence. Thus as natural selection extinguishes maladaptive variations, "the long run of experience may weed out the more foolish faiths. Those who held them will then have failed," and so much the better, James argues, for this also sets us on a truer path.[73] James's response to skeptics, then, is that their faith in failure is self-fulfilling. By refusing to act on trust, they forego powerful instruments by which they might vindicate particular beliefs, acknowledge certain truths,

[71] These four points are paraphrased from James (1911), p. 1100.
[72] James (1911), p. 1100.
[73] James (1911), p. 1101.

and therewith ameliorate skepticism. For this reason, he insists it is stubborn skepticism – not faith founded on trust – that is irrational. As he puts it in *The Will to Believe*: "*a rule of thinking which would absolutely prevent me from acknowledging certain kinds of truth if those kinds of truth were really there would be an irrational rule.*"[74]

Lessons for New Atheists?

I have offered an account that perhaps provides lessons to New Atheists, and not just about where they are too extreme, but also about how they might defend their positions more cogently. This might in turn help the religious reflect more critically on their own beliefs, thereby instilling a fuller understanding among devotees, whether or not they decide to abandon their convictions.

Earlier, we saw that Harris mocked faith for being self-fulfilling, but the same in fact applies to many arguments advanced by New Atheists. Though Dennett is more moderate, Dawkins, Harris and Hitchens start with the assumption that religion is false and vile. This introduces a range of confirmation biases. Dawkins excoriates religious justifications of slavery,[75] and Hitchens derides the passivism of Quakers,[76] both of them neglecting that members of this group, among others, risked themselves fighting to abolish human trafficking. Dawkins outlandishly speculates that religious upbringing is worse than sexual abuse,[77] and outrageously laments that the "status of atheists in America today is on a par with that of homosexuals fifty years ago,"[78] exhibiting an unfounded persecution complex that seems to guide much of his inquiry.

Confirmation bias similarly infects New Atheist assessments of religious scripture. While ideas repugnant or foolish from the standpoint of Western progressivism can certainly be found, New Atheists vastly exaggerate the extent to which this is so. Dennett, for example, pokes fun at the naivety of God molding Adam out of dirt,[79] not really recognizing that it is doubtful that ancient Hebrews took this story literally. After all, the story is immediately preceded by a different version where humankind is generated from

[74] James (1896), p. 477.
[75] For example, Dawkins (2006), Ch. 7.
[76] Hitchens, Dawkins, Harris and Dennett (2019), p. 125-126.
[77] Dawkins (2006), p. 317-318.
[78] Dawkins (2006), p. 4.
[79] Dennett (2006), p. 210; also see Genesis 2:7-23.

the divine word and in the image of God.[80] The story of Jonah similarly was not completely in earnest, but was a humorous narrative that audiences "would enjoy ... and not be forced to choose whether it could actually have happened or not."[81] Such is commonly taught in Catholic seminary, as is the fact that the Septuagint – the Greek translation of the Tanakh or Old Testament – incorrectly renders the Hebrew word for "young woman" as "virgin" in passages prophesizing about the mother of the Messiah to come. Greek speaking authors of the New Testament offered accounts consistent with this mistranslation. Harris seems to think this point is devastating,[82] not appreciating it is old news to educated believers and not particularly threatening since a young woman can simultaneously be a virgin.

A problem, in effect, is that Dawkins, Harris and Hitchens – Dennett again the exception – are not really putting their beliefs to the test. This is not to claim they should give religion a try, and see how it sits with them. Instead, it is to suggest that they should be sensitive to the contours of the tenets they are endeavoring to repudiate rather than cramming their interpretations of religious ideas into their own pre-existing narratives. Their critiques often just float free from things they are attempting to address; therefore, they do not make significant contact and benefit from intellectual friction that would hone what they say, softening overreaches, while perhaps enhancing the all-around incisiveness of their accounts. Indeed, it is sometimes as if they are channeling their inner Donald Trump, to put it anachronistically, and entering a world of alternative facts, complete with pejorative language. Hitchens, for example, titles his 2007 book *God Is Not Great: How Religion Poisons Everything,*[83] and goes on to wrongly claim John Adams owned slaves,[84] and talks as if Friedrich Nietzsche really thought there was a moment when God died,[85] as opposed to being an atheist predicting the demise of otherworldly values. He also claims that a Texas governor once said that English was good enough for Jesus, a story that appears apocryphal, however much we liberals may want it to be true.[86]

[80] Genesis 1:26-27.
[81] Boadt (1984), p. 468.
[82] Harris (2004), 94-95.
[83] Despite his harsh title and rhetoric, Hitchens – to be fair – is arguably gentler and more sensitive to cultural nuances of religion than Dawkins and Harris, perhaps because of his extensive travels and first hand contact as a journalist. That said, he is little better with facts.
[84] Hitchens (2007), p.181.
[85] Hitchens (2007), p. 67.
[86] Hitchens (2007), p. 110.

Dawkins satirically counters St. Anselm's and St. Aquinas's ontological arguments for the existence of God, indicating Christians are too stupid to pick up on flaws.[87] His rebuttal in fact fatuously repeats the repudiation of Gaunilo of Marmoutiers, a Christian monk and contemporary of Anselm.

Harris, in his turn, does not take time to understand the religion he hates most: Islam. In *The End of Faith: Religion, Terror, and the Future of Reason*, he regularly treats Qur'anic verses as self-sufficient atomic units when their meaning typically emerges out of a larger gestalt. For example, verses 6-7 of Al-Nur (The Light) states that a man's testimony about his wife's infidelity will be accepted if he makes four oaths and then a fifth inviting God's curse if he is lying. This sounds bad. But verse 8-9 clarifies that a woman averts condemnation if she makes four oaths to the contrary, and invites God's curse in a fifth. Much of the Qur'an has this structure, though not always compressed neatly into four adjacent verses. Unlike the Bible, the Qur'an has no stoning. Although women and men suffer 100 lashes for adultery,[88] it turns out that required evidence is practically unobtainable since the text demands four trustworthy witnesses who observed the illicit sexual intercourse.[89] It is plausible, then, these passages were offered to prevent harsh treatment, while still emphasizing adultery as the serious taboo that it was in ancient Middle Eastern culture by keeping the severe punishment on the record.

The above highlights a principle of informal logic articulated by R. G. Collingwood, who holds that the meaning of statements depends on the questions or problems they are meant to answer.[90] Thus the connotation of the statement "I threw the ring in the garbage" will vary depending on whether the question was "Where is your wedding ring?" or "Where is that cheap, plastic novelty ring?"[91] That identically worded statements carry different connotations when responding to different questions means that we cannot hope to understand texts merely by reading the words in them. We must also appreciate historically specific problems that texts were intended to answer.[92] The near impossible evidential standards for convicting someone of adultery and the

[87] Dawkins (2006), Ch. 3.
[88] 24:2.
[89] 24:4. Note that these passages and hence the four-witness rule do not apply to rape, though too often this is misconstrued both inside and outside of Islamic culture.
[90] R. G. Collingwood, *An Autobiography* (Toronto: Oxford University Press, 1939), 31-39 & 74
[91] Crippen (2019), p. 151, fn. 1.
[92] Collingwood (1939), 61-63.

likelihood that the edict was intended to curtail heavy punishments is a case in point, and there are many others. Hitchens, for instance, mocks the temporary marriages permitted in Shia but not Sunni Islam,[93] and such practices can indeed be troubling, as when older business men exploit vulnerable woman, sometimes below the age of consent, though this is hardly unique to the Muslim world. Notice that Westerners also have short-term relationships, and temporary marriage allows Shia Muslims to do the same within the confines of their religion and the political context of countries like Iran. In principle, moreover, the marriage is meant to ensure financial obligation for any offspring that ensue. Given the almost adolescent fixation with religious limits on sexual freedom found in the work of Dawkins, Harris and Hitchens, it is puzzling that any of them take issue with Muslims interested in temporary liaisons.

New Atheists have a particularly troubling tendency to decouple religion from sociopolitical facts. Harris does this when identifying Islam itself as a primary root of terrorism, adding that Muslims are too backwards for democracy, and engaging in apologetics for U.S. foreign policy.[94] When convenient, New Atheists also inject religion into sociopolitical affairs, with Dawkins, Harris and Hitchens all suggesting that Adolph Hitler was a closet Christian.[95] In short, New Atheists fall into a facts-be-damned attitude, and thus slide into sweeping, non-evidentially backed, self-verifying attacks. This not only generates misinformation, but deprives religious devotees of a rigorous exchange that might help them better understand their own religions, whether or not they decide to remain committed.

A lesson emphasized in many of today's research practices – and in pragmatic philosophy too – is that we make progress by focusing on particulars, and avoiding grand generalizations. A problem with sweeping claims is that they entail encompassing negations. Materialism, for example, is the universal claim that all real objects are physical. More formally, it holds that for any x, if x is real, then x is physical, or $\forall x(Rx \rightarrow Px)$. This is equivalent to negating the existential claims that non-physical realities exist. It logically implies that there is no x such that x is real and not physical, or $\neg\exists x\ (Rx \wedge \neg P\ x)$. The

[93] Hitchens (2007), p. 46.
[94] For example, Harris (2004), Ch. 4.
[95] Dawkins (2006), p. 310; Harris (2004), p. 106; Hitchens (2007), 236-243; for further analysis, see Cotter (2017), p. 43.

same applies to the metaphysical proposition that all reality is mathematizable or the proposition that all reality operates mechanistically: these assertions, too, are sweeping negations. Moreover, while these metaphysical propositions are useful starting points in specific scientific domains, it is difficult to see what is gained by asserting that every last nanometer of the universe abides by these principles. Metaphysical standpoints are in fact the mother of all confirmation biases, and it is not safe to assume they are true since some taken to be so in the past have shown cracks. The metaphysical supposition that time and space are absolute is now pressed by relativity, and quantum mechanics may be opening holes in the principle of causality. Dynamic systems theory likewise raises questions about conventional mechanistic metaphysics.

New Atheists stray far beyond what they actually know. A more fruitful and honest approach would be to avoid sweeping flourishes, such as Hitchens claiming in the subtitle of his book that religion poisons everything. The approach would lend itself to a more accurate account, and one that might play a role in rooting out certain ills that are found in religious culture. This would necessitate difficult tasks, such as sifting through histories and carefully studying scriptures, ideally in their original languages; it would mean consulting religious scholars to be sure of rendering defensible interpretations from scripture before launching attacks, and not following Dawkins by simply repeating 1000 year old criticisms that theists have already launched against their own religions; it would involve seriously examining political, economic and social factors inflecting religion, perhaps traveling so as to immerse within affected cultures and geographic regions, something that would especially benefit Harris's work. Above all, it would entail not writing for those already converted to New Atheism, and therefore thinking beyond the currently narrow limits of the movement.

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