

Scientific Atheology

Abstract:

Atheology is the term for exploring unbelief and explaining its reasonableness. Scientific atheology specifically appeals to current sciences and scientific methodologies to help explain why no gods are real. Folk religions and anthropomorphic gods can't survive, but science vs. religion is hardly the whole story. Only science joined by philosophical reflection suffices to skeptically analyze the natural theology arguments for supernatural gods, too aloof and abstract for direct confrontation over evidence. Theology's desperate maneuvers for avoiding science and scientific atheology only delay the inevitable. Partner atheologies wielding logic, ethics, and civics await to help theology extinguish the gods.

The term 'atheology' goes back to philosopher Ralph Cudworth, the seventeenth century Cambridge Platonist. He applied that label to the godless Greek philosophies, such as atomism and Epicureanism, which he was attempting to refute in the course of expounding a systematic theology (Cudworth 1678, 61). After falling into long disuse, twentieth century philosopher of religion Alvin Plantinga revived it, defining "natural atheology" as "the attempt, roughly, to show that, given what we know, it is impossible or unlikely that god exists" (Plantinga 1967, vii). Atheology thus stands opposed to theology's efforts to show the reasonableness of god-belief. Plantinga had in mind the distinction between revealed theology (divine revelation) and natural theology (human learning). All atheology is natural atheology, especially where atheology disputes revelation, so the 'natural' modifier may be omitted as redundant.

As both Cudworth and Plantinga easily granted, the body of knowledge arising from humanity's own capacities is extremely broad and diverse. Atheology makes appeals to that body of knowledge to explain why the reality of any unnatural god (and anything else similarly supernatural, transcendent, and so on) is quite implausible and unreasonable to accept. Atheology utilizes distinct methods, each appealing to some component of human knowledge. Two general kinds of atheology have dominated modern debates over religion. Where logic suffices to expose theological fallacies and raise skeptical doubts towards arguments for god's existence, "rationalist atheology" is undertaken. By contrast, "scientific atheology" relies on current science and scientific method to refute natural theology's appeals to natural matters to infer god's existence and to question any explanatory value for god. Impressive atheological challenges to religions apply these two methods, the rationalist and the scientific, in

cooperative concert in order to fully explain why god-belief turns out to be unreasonable. For example, Thomas Hobbes leaned heavily on the experimental science of his times, more frequently than logical criticism, to deny any immaterial deity. David Hume, by contrast, was primarily a rationalist atheologian in his religious skepticism. Great atheologians across many centuries and several civilizations have inspired rationalist freethought and skeptical doubt about religion, and many have been atheists themselves (Larue 1996).

Understanding the proper work of scientific atheology prevents common misconceptions about using science to criticize religion, and defending religion by evading science. Showing how science will know everything isn't required for successful atheology. Proving naturalism's worldview is not needed, either. For its part, theology must realize that the way it handles science largely determines its fate. Denying science delivers no religious immunity. Arguing that science won't know everything can't make religion more reasonable. Treating god like science's eventual discovery is a theological dead-end. But atheologians must also be warned against the distraction of depicting god as a falsifiable scientific hypothesis. The actual state of affairs is rather as follows. Science contradicts and dismisses folk religious deities having no scientific status. Theologically sophisticated religions dodge confrontations with science, but their deities lose reasonableness due to unavoidable philosophical objections raised by atheology. Scientific atheology specifically confronts natural theologies, whether they try to dismiss science as a challenge, or they try to coopt some science into an alliance.

The next section explains why theology cannot claim that science is unreasonably presumptive or metaphysical, and why theology won't evade the charge of unreasonableness just by fleeing scientific scrutiny. The third section distinguished appeals to scientific knowledge from appeal to naturalism; naturalism depends on science, but the reverse has never been true. Naturalism is useful for clarifying and defending science. Scientific atheology takes up the chase of theology when science must halt, where theology inevitably makes non-empirical claims beyond science's competence to dispute. The fourth section tracks theology deep into non-empirical territory, where scientific atheology shows why a god compatible with all events must be a god enjoying zero evidential support. On the other hand, as the fifth section describes, a theological insistence that there is evidence for god's divine action in the world – in some evidential gaps, or in surprising phenomena, or even in the absence of phenomena – always runs into irresolvable difficulties or devolves into pantheism. Relying on science makes natural theology work too hard for too little gain. What if natural theology could dictate what may count as science? The sixth section analyzes and criticizes Alister McGrath's manipulations of what Christians can accept as scientific knowledge. A suitably sanitized "Christian" science will easily confirm whatever theological position needs reinforcement, but this endeavor is too postmodernist and anti-realist, leaving nature

without form and McGrath's position void. The seventh section shows why no natural theology, not even McGrath's, can evade atheology's stern verdict against gods. If natural theology admits some degree of scientific realism, then the sciences can rule out divine action; if a natural theology denies scientific realism altogether, then science can't support theology at all and natural theology itself collapses; or, if theology picks and chooses among the sciences with one eye on scripture for deciding which ones have credibility, natural theology has plainly degenerated into ordinary apologetics.

This article's programmatic coverage of these core matters mustn't be mistaken for the best that scientific atheology or naturalism can achieve. To reach those achievements, the criticism of religion in the name of science must be reorganized and refocused. Too many atheologians nowadays are instead focused on finding out which simplistic atheist apologetics can get the most applause. Sorting religious criticisms launched at mass markets apart from sophisticated refutations fired in advanced debates is a chore for another time, however. Enough time has been wasted by internal squabbling within atheology, as theology gains unearned ground. Unless atheology gets its own house in better order, its relevance will fade, just as some secular and religious commentators already suspect. The low state of debate into which atheism vs. religion has fallen, at least for public viewing, calls for a scientific atheology setting matters straight.

Scientific Knowledge and Naturalism

Atheology must first establish that it can justifiably appeal to science. Religion cannot seriously protest any "begging of the question" from the use of science against it, since religion has no automatic right to deny that science offers knowledge. Where religion deprives itself of any intelligible way to question science by remaining so ignorant about it, none of its arguments are entitled to include "Science can't be right" among premises. Science can be right, and nothing religion offers is relevant to how much and how often science gets matters right. If the world around us is really quite different from what science's inquiries take it to be, establishing that will take far more than scriptural attestation, personal anecdote, or majority opinion. Popular religious disdain for science doesn't matter. Scientific knowledge counts as part of the body of knowledge available to humanity, regardless of whether individuals, religious or nonreligious, care to access that information. Atheology can appeal to scientific knowledge even if religion, or theology, won't.

The type of theology able to productively engage with science is natural theology. If natural theology is entitled to appeal to scientific information to assist its quest for god, atheology is no less entitled to apply that same information against god. Natural theology has to admit atheology's entitlement. After all, science has always had company while appreciating the impressive natural order.

Religions dating back to ancient times, quite independently from science, have appreciated the evident orderliness to nature, and credited a designing creator. Theologies of many religions have praised the tidy conveniences of environing habitats and the fine workings of human beings to “detect” signs of divinity. Theology mustn’t fault science for starting from what anyone would observe for themselves.

Nor should science stand accused of unreasonably presuming what it must, that the world has plenty of regular order to investigate. Theology has long complained that the scientific worldview is incomplete, since the sheer presumption that laws of nature are there to be discovered is a premise requiring justification, a justification neither science nor naturalism can ever supply. As philosopher of religion Roger Trigg puts this complaint, “It has to be taken for granted that the world as investigated by science is ordered and structured. This is not a fact that can be discovered through science....” Religion can explain this bewildering fact: “... reality is like that because God made it like that” (Trigg 1998, 81, 82).

Yet theology cannot have it both ways. Is it a plainly evident fact about the world that it displays patterns of lawful regularity, or not? If so, then science has every right to start from the same evident situation that theology can point to. If no worldly patterns are evident, then theology can’t point to any natural order as a sign of divine creation. Either science and theology can both reasonably proceed from the world around us, or neither may do so. Theology still expects its divine creator to explain why nature has any order, so rationalist atheology must take apart those cosmological arguments. Many atheological arguments involving nature actually depend on rationalist refutations of arguments from nature, rather than scientific atheology itself (Kenny 1969, Flew 1976, Martin 1990, Sobel 2003, Oppy 2006, Shook 2010, Philipse 2012).

As for scientific atheology, it does not deny that science does take as given some measure of natural structure just as common sense confirms. However, no scientific methodology dogmatically presumes any forever-guaranteed “uniformity of nature.” Nothing about science must deny the inherent limitations to inductive generalizations. Whether all events in the universe occur in regularities describable by some type of law is something that the sciences set out to discover, not something already known in advance. Likewise, whether scientific observations can be fairly reliable must also be discovered, not presumed. Science does use human capacities (usually instrumentally-assisted and machine-calibrated) to gather evidence about available facts and regularities in the world. Careful observational knowledge is crucial for scientific inquiry, but science doesn’t assume that all observations are equally good. Science presumes no more about the reliability of observational knowledge than common sense or religion may presume. It’s surely not science which presumptively assigns human perception a far higher level of credibility than non-scientific worldviews. Religions grants reliability to

all sorts of strange experiences and hallucinatory visions allegedly about unnatural entities and events. Science is less trusting, but that doesn't make science more presumptuous. If religious experiences deserve credible warrant, let theology demonstrate that, but rationalist atheology's skeptical examinations have kept revealed theology well in check (see Martin 1990, chaps. 6 and 7). Science's reluctance to accept alleged encounters with divine realities or unnatural occurrences is ultimately theology's responsibility, not science's.

Theology can't fairly accuse science of making bigger metaphysical claims, rasher perceptual leaps, or prejudiced anti-miracle judgments. However, some religions still take the liberty of directly denying scientific information. Yet the way that some religious denominations and sects deny some or all of science, or at least reject any relevance of science to divine matters, has no bearing on scientific atheology and won't slow atheology down.

Multiple methods of atheology work in concert to raise challenges to spiritual/religious worldviews. No single atheological strategy is burdened with the "refutation" of religion. Dodging science, as if science was religion's only threat, just leaves theology confronted by several potent atheologies. Rationalist atheology and scientific atheology are ready with their methodical investigations. However, no religious view enjoys immunity from criticism even if declares all of science, or even reason too, as "anathema" and contrary to the faith. Moral and civic atheology will have their say, as well. When moral theology argues that a god is required for orienting humanity towards the good and the right, moral atheology finds no such requirement and ponders how god-belief disorients humanity from ethical paths (Kurtz 1987, Epstein 2009, Aiken and Talisse 2011). When civic theology argues that god is needed to conform society to civil order, civic atheology points to religious disruptions of stable politics and turns to secular ideals of equality and justice (Hamburger 2002, Berlinerblau 2012, Leiter 2013). God-belief can flee from science only to run into more condemning atheologies putting even greater pressures on religions to reform and modernize.

Atheology's many disputes with theology shouldn't stop short of discussing all the advantages and disadvantages to both the religious and the secular ways of life. Theology has surely degenerated when religion's defenders think their advantage lies in a crude "religion vs. science" winner-take-all contest. And only a completely degenerate theology, a 'pseudo'-theology, would go so far as to claim that religion's reasonableness is finally secure when science is condemned as an evil lie. Atheology mustn't allow itself to get dragged down to that low level of diatribe. Scientific atheology certainly isn't brought to a halt by scientific illiteracy. Claiming that one's religion is immune from science isn't the same thing as justifying that immunity. A religious denomination can hypnotically repeat over and over how science knows little or nothing of nature – but nature doesn't seem impressed, technologies persist

in functioning, and suspicions towards self-inflicted scientific ignorance keep mounting. Sects claiming ignorance of science's knowledge should be understood literally, rendering them a poor source of information regarding science. Until extremely good reasons are fully established to show that science really is incompetent to comprehend what nature is doing and why, no religious sect enjoys presumptive plausibility for scorning inconvenient scientific truths.

Theology doesn't lend much help here. Theological rejections of scientific knowledge either resort to false propaganda about how science works, or rely on philosophical tactics to sharply limit science's reach. Countering philosophical tactics against science falls to good philosophy of science and epistemology. Scientific atheology operates well when science carries on with its work confirming theories, and philosophy of science guards against anti-science maneuvering. If philosophy of science falls short, or turns against scientific knowledge by adopting positivism, irrationalism, or outright idealism, then scientific atheology can still carry on by appealing directly to science itself, but its arguments would be considerably weakened. Successful naturalistic philosophy of science does lend helpful support to scientific atheology's work.

Science and Naturalism vs. God

Scientific atheology surely relies on scientific information, but it isn't the same position as naturalism, and cannot be reduced to naturalism. Nor does naturalism reduce to, or depend on, scientific atheology. The plausibility of naturalism doesn't depend on first showing the implausibility of gods. Confidence in science can rest on science's own well-earned merits, naturalism is entitled to a measure of plausibility as science progresses so well, and supernaturalism suffers from implausibility by its own intrinsic demerits (as rationalist atheology explains).

Naturalism, most generally defined, regards the current sciences as the best guides to what real things are doing and how they are doing it. Endless knowable and practical matters from art to agriculture needn't wait upon science's theorizing, but those matters won't be fully understood or highly improved unless scientific information is taken into account. Specific varieties of naturalism may emphasize science's methodological merits or their theoretical results, while others prioritize some sciences over the rest, and a few envision how all knowledge ultimately answers to a single science alone. Varieties of naturalism can be catalogued and compared (Shook 2010). Our discussion only invites a brief survey of science's beneficial relationships with naturalistic philosophy in general as far as atheology is concerned, before proceeding on to scientific atheology's narrower purview.

First, when sciences ponder their ultimate theoretical models and core principles, science becomes somewhat philosophical, and naturalistic perspectives on reality as a whole are forged.

Intellectuals pursuing such questions and offering original answers can play the role of both philosopher and scientist for a time, and there's no shame in that. There is a real difference between a philosophically-minded scientist and a scientifically-impressed philosopher, to be sure. The second type isn't to be trusted. Philosophers heralding arrivals of intellectual revolutions are all too common, and they seem the most disappointed when scientific progress heads elsewhere instead. Leaders of genuine scientific revolutions, from Aristotle, Galileo, and Newton to Helmholtz, Mach, and Einstein, are justly recognized for their philosophical contributions (Cohen 1985). Naturalism attends to real scientists and prizes their speculative ventures, and only applies philosophy to advance a naturalistic worldview entirely indebted to their successive paradigms.

Second, naturalism can assist efforts to keep the social sciences, life sciences, and physical sciences consistent with each other. Ensuring that all the sciences are coherently describing the same natural reality, without ontological rifts or deepening metaphysical chasms, cannot be task of any scientific field by itself. Although multiple ontologies are more of an inconvenience for the sciences than alarming problems, science isn't left behind while assembling a naturalistic worldview. Proposals for adjusting ontological commitments among sciences must go back to the sciences for empirical confirmation, since naturalism shouldn't amount to metaphysical speculation obeying its own rules. This empirical or pragmatic naturalism goes back to classical pragmatists such as John Dewey and analytic pragmatists led by W. V. Quine; heirs of that naturalistic approach include Ronald Giere (2006), and James Ladyman and Don Ross (2007).

Third, when the inferential reasonings involved in scientific methods require reflective scrutiny so that they can be better understood and improved, philosophers help expound and clarify scientific methods without resorting to any unnatural principles or divine design. Investigations and improvements upon logical methods of inference and heuristic technique can be helpful to scientific inquiries, so long as naturalism doesn't imagine that it bestows apriori rules from transcendent heights. Only successful scientific theorizing ultimately grounds confidence in applied inferential methods, according to that empirically-oriented naturalism. Some religions want to credit a god for our rational capacities, but naturalism assembles a scientific account of human intelligence instead, so science needn't admit any reliance on unnatural matters.

Fourth, when the sciences are under intellectual attack by rivals offering non-natural worldviews or paranormal modes of knowledge, philosophy explains why these unscientific alternatives aren't superior to science. No scientific field could undertake the task of empirically refuting grandly metaphysical or theological claims about alleged non-natural realities. Science can disprove religious claims about supposed events within the world, such as wrong explanations for life or mistaken ideas

about miracles. However, science doesn't refute theological notions of transcendent matters, since science cannot take those notions to be meaningfully testable. Religious convictions remain meaningful to believers, of course. Rationalist and scientific atheologies must be applied instead.

Fifth, when science suffers political attack by those demonizing science, obstructing scientific research, or inhibiting science education, naturalistic philosophy can defend the value of intellectual freedom and scientific progress. Naturalism can philosophically explain why science wouldn't destroy life's meanings or morality's obligations. Naturalism's worldview can be hospitable to human rights and civil liberties, which in turn justify separating church and state. Theologies have denied science's compatibility with the self, freedom, and rights, so naturalism must philosophically engage those issues, while civic atheology criticizes religion's uneven record on liberty and justice.

Naturalism's broad tasks aren't left to the sciences, fortunately, so they can stay focused on discovering how the world works. A completed naturalistic philosophy would, ideally, leave little hope for nonscientific challengers. In the meantime, naturalistic philosophizing in the form of atheology keeps a close watch on theology while science marches on. Theology can also be content to let science carry on, it must be emphasized, and many theologians have judged that science's knowledge consistently elevates god-belief's reasonableness. Other theologians dubious towards science's assistance can at least avoid conflict by proposing empirical compatibility: No matter what science discovers, that knowledge could not disprove god. On these two theological options, a god would be forbidden from doing anything that looks miraculous to science – perhaps a small price to pay to prevent embarrassing refutation. It strikes nonbelievers that a god unable to detectibly affect the world couldn't be reasonable, and shouldn't be interesting to the religious. Yet time and time again the religious question arises, “Can science prove god doesn't exist?” as if science's incapacity implies that religious belief is somehow reasonable.

No scientific field is designed to either help confirm or disprove an aloof supernatural or transcendental god. That fact about science is no surprise to philosophy. Arguing that “Something cannot exist where no credible evidence supports it,” makes a philosophical claim. It's surely not a claim that science would itself endorse. Science figures that plenty of unknown reality extends beyond any evidential base it will collect anytime soon, and speculative theorizing at scientific frontiers often postulates matters not yet enjoying supportive evidence. Arguing that “Something cannot exist where no credible evidence will ever be found to support it,” is even more philosophical, since that proposition won't be found among science's empirically tested hypotheses. What science cannot deal with, it ignores, without troubling with denials. Arguing that “Something science ignores cannot be believed to exist,” or that “Something science has no need for mustn't be believed to exist” are claims as philosophical as they

come, since neither proposition will ever be a postulate within science's experimentally confirmed theories either.

Among naturalist philosophers, these propositions can be frequently heard, and they are also heard loud and clear from some scientists in their philosophical reflections. Scientists are entitled to speak on behalf of science, and their naturalistic pronouncements can sound like they are saying what science itself says. We all must listen, and speak, more carefully. The way that roles blur and overlap between 'scientist' and 'naturalist philosopher' doesn't mean that philosophical claims are just like experimentally confirmed hypotheses. Doing science is one thing; defending science is another.

Evidence vs. God

Science's defenders can get lured beyond science's knowledge because the scientific worldview is at stake, and religions have already gone so far beyond science. Chasing religion into that murky void renders sharp scientific tools useless. Thanks to the powers of the human imagination, a conception of deity can be intelligently designed and re-designed by flexible theology to stay compatible with any and all scientific information. Scientific knowledge is not permitted to squarely grapple with a 'shape'-shifting deity. Talk of evidence for god becomes empty rhetoric, as does talking about evidence against god. Science really isn't involved much anymore, and it's not science's job to monitor and rebuke revisionary theology. When one encounters a "scientific" argument against a vaguely supernatural being, watch for the stated or tacit premises of philosophical origin needed to make it a valid argument. There are valid arguments weighing heavily against supernaturalism, and they are all philosophically atheological.

Friends of science who petulantly insist that "It still all comes down the evidence" doesn't squarely set science against god, either. It's actually not a simple question of evidence. Nothing gets talked about more, with wildly different meanings, than 'evidence'. In common parlance, evidence 'E' typically counts as evidence for hypothesis 'H' just in case that if H were actually so, then E would in fact be found. The mysterious creature Sasquatch would leave huge footprints in these mountainous lands; here is a huge footprint; hence this footprint is evidence of Sasquatch. Science seems no different: The mysterious Big Bang would leave cosmic background radiation; there is such radiation; hence that radiation is evidence for the Big Bang. Religion seems no different: A supreme God would endow creatures with beneficial functions; here are humans with helpful bodily features; hence the power of sight is evidence of God.

These inferences are all fallacious, of course. Not all ‘evidence’ should count as evidence. Science is only interested in what it takes to be credible evidence, evidence that is first heavily tested against established science to confirm its significance, before it is permitted to have any relevance upon a hypothesis that has similarly survived checks for compatibility with current theorizing. Science utilizes credible evidence, evidence with significance and relevance for ongoing scientific inquiries. Scientists do collect plenty of information during their inquiries that don’t yet rise to level of credible evidence, in hopes that such things might be useful in the future. Paleontologists carefully examine fossilized bones collected centuries ago, bones that weren’t credible evidence of anything back then, but they can be for science by now. Much theory is required in order to judge what novel credible evidence would be suitable for experimentally testing more theory (see Pigliucci 2010 and Kosso 2011 for introductory guides).

This evidential feature of science’s progress hasn’t gone unnoticed by science’s intellectual rivals. Theology is happy to let theory decide evidence, approving only the ‘religious’ evidence that could only be compatible with established dogma. Managing evidence is essential for any belief system, after all. No religion so heavily dependent on singular sources for credibility, such as scriptures or ecstasies, has lasted for long without erecting theological standards for what shall in fact count as genuine divine inspiration, so that only the ‘right’ sort of evidence shall be in steady supply as the religion perpetuates itself across generations. Theology imagines that its capacity to explain all the “right” sorts of evidence is somehow elevating its credibility. A religion’s followers are likewise deceiving themselves by thinking that religion’s ability to explain plenty of significant ‘evidence’ is just as impressive as science’s ability to explain its own evidence. But not all evidence was created equal.

There is hardly any comparison between a scientific field’s inherent drive to appreciate the significance of all potential evidence and a religion’s obsession with the same ‘evidence’ generation after generation. Science’s serious competition has been natural theology, which is empowered to consider far more evidence than just revelation. However, when theology concerns a familiar deity supposedly responsible, directly or indirectly, for all creation, that natural theology is inexorably driven towards regarding all evidence as relevantly significant evidence. By contrast, a natural science functions by carefully considering only a sharply delimited portion of potential evidence in order to experimentally test original hypotheses. Science must take into account far less ‘evidence’ than natural theology, and that is the engine of science’s progress while natural theology stagnates.

Can theological propositions about god be anything like scientific hypotheses about nature? Scientific atheology must first respond to a theological ploy that evidence cannot fail to support god’s existence.

Perhaps god would be so unlike the world around us that all recognition or conceptions of god must be impossible. Or maybe god needs to stay hidden, lest divine influence makes us do what god wants us to do. Whatever the theological rationalization, it still looks like a desperate tactic to evade refutation. At the very least, such a completely hidden god must be the most difficult deity for science, or any empirical inquiry, to refute. A god beyond all empirical testing has a strange status: is there no evidence for such a deity, or does the entire universe somehow attest to its reality?

This kind of supreme being is allegedly an entity behind/beyond nature which can neither be observed nor the effects of any of its activities be detected. Does that mean that science cannot disprove such a hidden god? Don't presume that science doesn't know how to deal with completely unobservable entities, as scientific atheology will remind us. Many scientific theories deal with unobservable forces, energies, and entities. However, the reality of such a thing becomes credible only when that thing would have some definite relationship with the observable world, so that there would be some detectable difference made. If there's no way to tell how the world would be observably different were this unobservable thing to exist, it becomes impossible to take the idea of it seriously. The idea is not testable against anything in the world. If a theory about an unobservable entity cannot point to any predicted experimental evidence in its favor, science simply rejects it as not believable at all. Science doesn't need to prefer a better theory before rejecting such a poor "theory." There isn't even a potential hypothesis here, about this hidden god – conceiving it (however one might try) won't ever be used to produce any empirical evidence in its favor. A hypothesized real entity offers an explanation for predicted detectable events which that entity is directly or indirectly responsible for. A notion lacking any empirical support cannot have any explanatory power. Since it never requires anything to happen, nor forbids anything from happening, such a notion can never enjoy empirical support, and it isn't any sort of explanation of anything. Put briefly, a notion compatible with everything cannot explain anything. The atheologist, unable to see any likelihood that a god exists (due to fatal flaws in theological arguments), wouldn't be impressed. By science, and by common sense, a god compatible with all evidence renders all evidence irrelevant to supporting its existence (see Dawes 2009, chaps. 6 and 7; Howison 2011, chap. 3).

The hidden god notion cannot ever be a scientific theory or even an explanatory hypothesis, much less a "disproven" explanation. Theologians at this point may change their story, saying that their god isn't quite so hidden, since they never meant to say that god does *nothing* detectable. "God did do something observable," they exclaim, "since God is responsible for universe's special laws or surprising events, which could have been different if no god really exists." Scientific atheology can take up any alleged example of divine action in the world for refutation, as the next section recounts.

Gods in Gaps and Surprises, or Hiding Right in Front of Us?

Incompatibilities abound between religions and the sciences. Sciences dispel typical religious notions held by many ordinary religious people. Beliefs that evil spirits cause diseases, healers wield magical powers, or priests beckon miracles from heaven are common religious notions around the world rightly dismissed by scientific knowledge. Applying established scientific knowledge against superstitions, folk religion, pseudoscience, magical thinking, ‘psychic’ abilities, ‘faith’ healing, ‘miracle’ workers, and the like, is the bulk of the work undertaken by skeptical investigators exposing all the ways that people can be deceived (Kurtz 2001, Frazier 2009, Bridgstock 2009, Pigliucci and Boudry 2013). The scientific refutation of religion can take the form of showing why alleged miraculous events aren’t so factual, imagined unnatural powers can’t be efficacious, and wished-for divine interventions aren’t really happening.

The world’s theologies, for their part, aren’t ardently promoting astrology anymore, and they only half-heartedly acknowledge fresh miracles, rarely credit reports of demonic possession, screen out clerical pretensions to psychic abilities, and omit faith healing from theological treatises. Nevertheless, scientific atheology’s skeptical stance against common religious convictions is a major component of atheology’s opposition to religious belief.

Theologies still profess an assortment of allegedly divine responsibilities and interactions with the natural world. Atheology has to discriminate different kinds of divine interventions proposed by distinct theological strategies. For example, one theology proposing that a natural law discovered by science was forged by god while creating the universe is very different from another theology proposing that observed deviations from natural law in present times are signs of divine action happening now. A theology that has nothing to add about science’s understanding of natural forces, energies, and laws, but only ask that those things be taken as indirect evidence for god’s divine act of original creation, is a theology making some sort of cosmological/design argument that science itself would not contradict. On the other hand, a theology suggesting that some scientifically confirmed phenomenon is itself good evidence that divine action is present (or lurking nearby) requires a responding challenge defending the scientific worldview. Either way, examining those theological arguments can expose their fallacious inferences or mistaken premises, sending that debate into the purview of rationalist or scientific atheology. A survey of theological approaches to special divine action cannot be undertaken here (see e.g. Saunders 2002, Russell et al 2006, Shults et al 2009), but three primary types can be discriminated and matched with scientific atheology’s responses. Space is lacking to discuss those responses in detail; readers can consult (Drees 1996, Nielsen 2001, Edis 2006, and Stenger 2010).

First, there are theologies suggesting god is responsible for alleged facts or events that cannot be scientifically understood. Because of some noticeable gap in scientific explanation, there is an opportunity for theology to ‘see’ divine acts that must be responsible rather than any natural process. This “god of the gaps” kind of theology is comfortable telling science where it will never fully understand curious matters. Theology helpfully offers its supernatural explanations for such mysterious matters, such as divine appearances in front of stunned witnesses, odd gaps in the fossil record between species, inexplicably “fine tuned” laws controlling the universe’s evolution, inexplicable features of cellular reproduction through DNA, unexpected cancer remissions, mystifying emanations of consciousness from brain activity, indubitably free choices deemed impossible by scientific determinism, and admirably moral intuitions that evolution alone couldn’t generate.

Rationalist atheology reminds all sides how supernaturalism cannot be established merely from science’s current limitations. Scientific atheology goes farther, constructing responses to “god in the gaps” proposals that either (a) show that alleged ‘gaps’ are not actually observed; (b) justify why science can account for the inevitable gaps; or (c) explain how further scientific research will close the gaps. For example, paleontology and evolution account for observed transitions between skeletons of species, fossilization chemistry and geology explain the paucity of preserved fossils, and genetics cannot be contorting to support intelligent design (Young and Edis 2006). Scientific atheology runs out of gap-closing tactics when available scientific theories are exhausted. Deeper reflections for dissolving stubborn gaps, such as the perennial mind-body problem, overlap with naturalism’s strenuous philosophical efforts. Those efforts at best have been suggestive rather than conclusive, as theology is pleased to emphasize (Moreland 2008).

Second, there’s the kind of theology proposing that a special divine action is detected in some shockingly unexpected but scientifically verified process that naturalism hadn’t already made room for. Because of a confirmed discrepancy with naturalism’s worldview, so it appears, this “god of the surprises” kind of theology infers that only a supernatural intervention could be responsible. Examples from earlier centuries are the Newtonian “action at a distance” effects of gravity (quite materialistically impossible!) that suggested a divine medium (absolute space?), and the Vitalistic doctrine that something spiritual in addition to organic matter must be conveyed through sexual reproduction. Both theological suggestions were eventually overridden by better science: the theory of relativity and the discovery of DNA. Nowadays, certain prominent theologians appear to be enjoying naturalism’s discomforts over such things as quantum mechanical features such as chance, non-locality, entanglement, and holism; physical processes resisting reductionist explanations so that “emergence” and “downward causation” must be invoked; and life forms self-organizing so effectively within the dynamic biosphere that natural

laws seem inadequate to describe their developing “complexity.” Physicist John C. Polkinghorne illustrates the theological strategy of making theism look plausible by equating naturalism with foolish reductionisms, all the while picking and choosing from well-confirmed science just the information he expects to keep trinitarian theism plausible (Polkinghorne 1998, 2009).

Naturalism – if presumed to be causally closed, particulate, deterministic, reductionistic, and hostile to consciousness and free will – has to suffer the indignity of refutation by these new scientific discoveries, according to “god of the surprises” theology. Even better for theology, the grounds for all of naturalism’s objections to things like souls, spiritual experiences, and the supernatural may be crumbling. (The small industry devoted to psychic powers like telepathy, clairvoyance, and psychokinesis also adore quantum and emergent phenomena.) Theologians can now ask its leading questions. Why must we wait for natural chance to haphazardly cause evolution, when inserting god’s quantum-level influence would guide evolution rightly? Why must souls be cast aside for molecules in motion, if intelligence may have a holistic cosmic basis and shape up molecules to suit its larger goals? Why must finite consciousnesses be limited to mechanical means of communication, if brains are complex enough to be fundamentally unified with each other (and with god) at some quantum or emergent level? Religious thinkers must settle their own disputes over whether divine action should be discerned in such novel phenomena (e.g., Bartholomew 2008, Wegter-McNelly 2012). Atheology has to answer why supernaturalism cannot be credibly inferred from naturalism’s seeming troubles.

Scientific atheology first points out that naturalism’s position is *not* agreement with whatever the sciences used to say, but agreement with what the best scientific knowledge says *today*. If, according to the latest science, nature does display more holistic aspects, causality is a more flexible matter, or determinism has an altered meaning in light of complex second-order formulas and functions, then naturalism is updating its worldview. Naturalism continually strives for a coherent and systematic worldview, coordinating the up-to-date knowledge of all the sciences. Although naturalism may fall short of this high standard, it cannot be refuted by science. Scientific atheology next formulates its replies to specific theological suggestions that divine action can be detected in oddly novel phenomena. Theology may be misinterpreting the available phenomena, underestimating ongoing scientific advances, or forgetting how the persistent absence of evidence is exactly that.

Third, some theologies propose that peculiar natural processes that astonish our common sense or expectations about nature are in fact divine powers at work as part of the world. Because of the way that a natural process is so peculiar, these theologies judge that it is a place where natural action and divine action are identical, and god and nature overlap. Aside from pantheism’s view that god is identical to nature and religious naturalism’s reverential attitude towards nature, the optional “god in the world”

theologies here include pervaism's view that god immanently infuses all of nature while staying immaterial; panentheism's inclusion of nature within a greater creator god; panpsychism's idea that nature is intrinsically conscious and guided by god's cosmic mind; and process theology's view of a cosmically emergent god intimately involved with nature's development. It must also be noted how speculative thinkers disagree about the full significance of any particular phenomena. For example, quantum holism, or biological emergence, could be regarded as evidence for panentheism by one thinker and evidence for cosmic consciousness by another, and other thinkers try to combine panentheism with panpsychism (consult Clayton 2004, Clayton and Davies 2006, Clarke 2003, Wallace 2007, Cobb and Pinnock 2000, and Kasher and Diller 2013). The growing body of work from these non-supernaturalistic theologies has received little atheological response, or much attention from philosophical naturalism generally, although their own dialogues have grown substantially (Wiebe 1991, Clayton 2000, Barnes 2000, Barbour 2000, Lindberg and Numbers 2003, and Clayton 2008). This situation is regrettable, and hopefully will be remedied in the future. Theological alternatives to the supernatural deserve serious consideration, and close atheological scrutiny. This is especially valid because non-western theologies, along with syncretic east-west theologies, will represent a far larger proportion of religious speculation in the future.

Atheology is obliged to point out how revisionary theologies eager to see divine action as fully within, and continuous with, natural energies and processes are taking a grave risk. Scientific atheology would ask, if those supposedly divine actions are also quite natural and understandable by science as well, then why must they be regarded as divine? They are quite different, weirdly, from what naturalism had expected, but naturalism always adjusts by incorporating into nature anything confirmable influential and continuous with the rest of nature. Science didn't discover gravity only to have it declared supernatural. The neutrinos that imperceptibly stream through us aren't supernatural. The quantum realm isn't supernatural. Allegedly 'divine' powers thoroughly and intimately connected with the rest of nature are just more natural energies, and not really manifestations of an unnatural deity.

Additionally, unless a "god in the world" theology can demonstrate that 'divine' powers in the world also have a reality extending beyond the world, it will devolve into just another pantheism. Religious believers can reverentially worship the universe's holistic features or its emergent ends, but nature worship is a destiny far from where ordinary theists expect to be led. Most Christians aren't snapping up the latest books about cosmic quantum consciousness because they want to become nature worshippers. This is really theology's problem, not atheology's, but atheology must be aware when revisionary theologies really aren't talking about a god anymore.

Natural Theology Revived

Theology ties itself in knots trying to evade science or supplement science. There could be a more clever strategy. What if theology could acquire control over what actually counts as scientific? The medieval stranglehold over anything claiming to be knowledge of the world can't be reinstated in modern times, yet modernism isn't what it used to be, at least in some halls of academia. Perhaps natural theology could be fully revived by designing a method for theologically interpreting nature. Theologically interpreting human experience would always be the bulwark of the faith, but conceding reality to science and/or metaphysics may have gone too far.

A new generation of Protestant theologians have sought a fresh way to deal with nature. Alister McGrath, former Professor of Historical Theology at the University of Oxford, and presently Professor of Theology, Ministry, and Education at Kings College London, exemplifies this reconstruction effort. Whatever nature may be, for Christians it is at least creation, made by a god whose designs must have something to do with the designer. Dangers to the faith associated with traditional natural theology, according to McGrath, arise from its method of starting from what is known about nature to reasonably infer the existence of a lone supreme supernatural creator, without presuming any religious convictions along the way. This natural theology tried to explain and reasonably justify god-belief to anyone, not just to people who are already believers. McGrath's recent work to reform natural theology abandons that universal goal of persuading non-Christians, and abandons traditional natural theology. Instead, his more modest goal is individual theism: showing how someone who is already a firm believer can reasonably accept natural knowledge because all natural knowledge turns out to be consistent with god-belief.

Phrased in his own words, from his recent book *The Open Secret: A New Vision for Natural Theology*, he writes, "This book sets out develop a distinctively Christian approach to natural theology" (McGrath 2011, 3). In other words, doing natural theology requires first being a Christian. If you are a Christian, then you're ready for Christian theology:

It is argued that Christian theology provides an interpretive framework by which nature can be "seen" or "read" in certain specific ways – ways that are not necessarily mandated by nature itself. It is argued that Christian theology provides an interpretive framework by which nature can be "seen" in a way that connects with the transcendent. (2011, 3)

McGrath isn't shy about repeatedly and clearly stating his new methodology: "A Christian understanding of nature is the intellectual prerequisite for a natural theology which discloses the Christian God." (2011, 4)

McGrath's evident confidence that his method will yield the expected theological results probably isn't misplaced. Indeed, success appears to be guaranteed. So long any information about nature is first re-interpreted using Christian truths, that information can be 'rendered' logically consistent with god, 'discovered' to be evidence for god, and even 'discerned' as divine action by god. Logical consistency is not hard to achieve, so long as theology remains suitably vague about god. If the theological conception of god cannot be caught in a contradiction with "re-interpreted" natural facts, which shouldn't be difficult to pre-arrange, then those facts are logically consistent with god and cannot disprove god. Interpreting natural facts as evidence for god isn't much more difficult. So long as a Christian is prepared to expect the known natural facts, predictably there given what god can and would create, god could appear to be the 'best' explanation for those facts, so they can count as confirming evidence, in a way. Satisfactorily re-interpreting aspects of nature into confirming evidence for the Christian god can keep theologians busy. Detecting divine action in natural processes is far more adventurous for Christian theology, due to the implications of overlapping god and nature, but McGrath seems open to the idea.

McGrath's confidence in his kind of natural theology doesn't extend as far as letting science deliver knowledge of nature in its own way, prior to theological treatment. Instead, science must be denigrated as just one way of interpreting nature among many. This denigration conveniently short-circuits traditional natural theology's overreliance on science, opening the way for McGrath's new natural theology. It also makes interpreting any scientific theory exceedingly simple – where a scientific theory represents nature in a manner too difficult to reconcile with the familiar Christian god, this scientific information can be set aside and ignored as merely the "naturalistic" or "atheistic" interpretation. In McGrath's words,

Like a text, nature is "read" or "interpreted" in a wide variety of manners. Similarly, scientific theories can be "read" or "interpreted" in markedly divergent manners: some thus interpret Darwin's theory of natural selection as entailing atheism, where others see it as strongly supportive of belief in theism. Yet while nature is patient of such multiple readings, it neither demands them, nor legitimates them. Nature does not provide its own authorized interpretation. (2011, 148)

In a way, McGrath's manner of metaphysically taking nature to be indefinitely pliable, interpretable by any worldview, graciously extends to rival worldviews the same right he arrogates to his theology. In a way, he couldn't fairly complain if naturalism adopted a parallel metaphysical position –

how does this sound for a naturalistic mantra: “A naturalistic understanding of nature is the intellectual prerequisite for a natural science which discloses the naturalistic worldview.” In fact, if a philosophical naturalism did claim that only by first accepting naturalism could a monopolistic science deliver all the evidence needed to confirm naturalism, McGrath couldn’t be surprised. He frequently accuses naturalists and atheists of assuming that the only way to know nature is through science, a science only theorizing about naturalistic entities, so that science’s “discovery” of a natural world has been conveniently predestined. McGrath accordingly pursues arguments with this presumptuous naturalism in many of his books, although when he engages in polemics with popularizers of science and atheism, their “atheist fundamentalism” is depicted as the real problem. (McGrath and McGrath 2007).

Ultimately, in a respectably postmodernist standoff between rival grand narratives, McGrath can play for that tie. He isn’t trying to rationally convert nonbelievers, but only to defend reasonable believers. Furthermore, despite the way that McGrath takes nature away from science, denying that nature can be conceived as having its own fixed reality to help decide the truth between interpretive narratives, his own new theology, to be fair, does the same thing to god. As far as theology is concerned, god cannot have a pre-conceived nature of its own, permitting theology to work with any ideas about god that may prove useful: “the essential prerequisite for a true knowledge of God is the abandonment of any preconceived ideas concerning God’s nature, or the manner and place of God’s revelation.” (McGrath 2002, 278-9)

McGrath has to negotiate the theological hazards he is steering towards, since he can’t really think that a god with a plan would only create a nature without form – wasn’t the point of a divine creator to give the world its definite form? That’s why this notion that nature has no intrinsic structure isn’t McGrath’s final answer, but only a metaphysical obstruction artificially raised to prevent science from having any final answers. When humanity uses its cognitive powers to do empirical science, nature remains disguised, but once our eyes are opened with religion, only then does reality come into view. One wonders why he bothers with science, having so little regard for the human intelligence that created science. McGrath, like some similar Calvinist theologians, implies that our brains are only properly functioning while believing in the supernatural creator – so selective theological interpretation can’t be avoided here (McGrath 2010, chap. 24).

Scientific atheology must point out that a natural theology crediting god for scientific intelligence knots itself in contortions when independent science can’t confirm god. If divinely created intelligence by itself couldn’t eventually find god, as traditional natural theology claimed it could, then why bother appealing to any science? Revealed theology had already presumed that science was irrelevant, since any creator desirous of making people who could directly and intuitively know god

wouldn't rely on any lesser mode of knowledge. When McGrath appeals to revelation to ensure that any science won't diverge from that revelation, it is clear that he had no intention of letting natural theology enjoy independence, just as he forbids science's independence. There won't be any independent confirmation from nature for god.

Can Natural Theology Evade Atheology?

Ultimately, McGrath doesn't need nature, but it would be a grave injustice for atheology to accuse McGrath of entirely displacing science for theology. He is determined to find just the right combination, so that his approach can evade criticism from science or scientific atheology. Finding some amendable combination is crucial. His "scientific theology" cannot really float freely between two pliable realities, god and nature, since that would permit an indefinite number of equally valid grand narratives, even for Christians. Constraints he needs, and constraints he finds.

First of all, McGrath is no radical theologian – he is quite self-consciously working within the Reformed tradition of Protestantism. Nor is he a radical science-denier. He has a scientific background, and can whole-heartedly accept exciting fields of science, such as genetics or cognitive science. He is quite capable of accepting a scientific theories where their accounts conveniently line up with his Christian narrative. For example, the current cosmological model of the big bang origin of our universe has all the validity one could wish, since it is so neatly conversant with Christianity's "Let there be light" tale, so McGrath doesn't label the big bang and its "fine tuned" laws as optional atheist interpretations. (If future cosmology had another paradigm shift to prefer a steady-state theory, that eternal universe theory would revert back to a mere naturalistic interpretation in McGrath's eyes, one suspects.) When the biological model of evolution by natural selection is the topic instead, McGrath cannot lend it much credence, so "dialogue" is nearly impossible: "From our discussion of the religious aspects of modern cosmology, it will be clear that the physical sciences offer significant and positive grounds for dialogue between science and religion. The situation is quite different in relation to the biological sciences..." (McGrath 1999, 186) Apparently god can be "seen" in the heavens but not on the earth, at least the earth that the life sciences are looking at. Nowhere does McGrath dismiss geology as merely a naturalist's interpretation, so he isn't a flat earth or young earth theologian, but he is quite sure that natural evolution cannot be correct.

Let us grant for the sake of argument that McGrath can flexibly adjust his preferred Christianity into alignment with the entirety of natural knowledge as he selectively interprets it. His theological success must be judged by his fellow Christians, not atheists. Atheology instead passes judgment on McGrath's overall aims and methodology insofar as reasonable god-belief is concerned. How could

atheology accomplish this criticism? Perhaps atheology has been rendered irrelevant here. McGrath's "interpretive individual theism" is designed to permit Christians to reasonably believe in god because all human knowledge can be coherent with this god. Not only does this new theology eliminate possible grounds for criticism of god belief (what 'knowledge' inconsistent with god must a believer admit?), but no rival worldview could have a better explanation for all human knowledge. And keep in mind that the handy formula, "for any natural fact/event, god wanted it that way," enjoys the tie-breaking merit of simplicity just in case a rival worldview can muster up an equally "best" explanation for the world.

Atheology's available strategies against this interpretative individual theism are limited. There are three vulnerable joints to its skeletal metaphysics.

First, scientific atheology can take aim at a significant vulnerability: McGrath's view that divine involvements with the natural world deserve to be called "explanations" of the natural evidence, so they can be fine candidates for the winning title of "best" explanations. Scientific atheology can't agree. McGrath has an extremely thin notion of what can count as an explanation, and his natural theology is so all-encompassing that anything and everything that happens in the natural world must be countable as evidence for god. There should be another long reflective pause here to ponder whether the use of god to 'explain' all evidence permits god to have any explanatory power at all.

Second, McGrath's postmodernist pliability about god is Christianity's business, but his pliability about nature and science stands open to criticism. Scientific atheology can turn to philosophy of science for assistance. Can his views about nature's indefiniteness and science's anti-realism withstand scrutiny? Regardless of McGrath's repeated invocations of figures such as Thomas Kuhn and Ian Barbour, that kind of scientific anti-realism never was a dominant paradigm in the social sciences, much less any other science, or philosophy of science. If more realistic views on science are genuinely mistaken, McGrath offers nothing to prove that case. His invocations of quantum mechanical "complementarity" do no metaphysical work for him here, since quantum mechanics is entirely agreed on the vast explanatory power of its physical laws and formulas, ruling out any alternative model for the quantum level of reality. The disputes over ontological interpretations, so enjoyable for physicists, does not extend to doubting whether this scientific field is getting something about reality very right, and that correctness leaves no room for theological "interpretations," as if god could be at work there as well. Quantum mechanics as a whole is strongly realistic about whether nature obeys its highly-confirmed quantum laws, even if it deviates from outdated realist expectations about locality and strict determinism (Whitaker 2006). McGrath can't seriously claim that quantum mechanics as a whole should be demoted from yielding valid knowledge about nature.

If McGrath has an adequate philosophy of science able to settle the general question of scientific realism, he hasn't published it yet. Nevertheless, he must answer to philosophy of science about some serious issues. What does he know about scientific methodology that science doesn't? He says that nature never decisively indicates which scientific theory gets it right, but if that's so, then it's a mystery how experimental tests ever narrow down theoretical choices. For all we know, the earth could really be at the center of the universe, despite good evidence to the contrary. In fact, McGrath isn't forced into that absurd position, since (1) he denies that nature has an intrinsic, theory-independent reality, so the earth strictly speaking can't really "be" anywhere, and (2) he'd admit that there's enough positive evidence to rule out an earth-centered interpretation. The reader may judge the sanity of that first option. Philosophy of science notices the second option's admission that science can rule out poor options through theoretical progress. Why can't natural evolution ever get the point where its extensive confirmation effectively rules out other options? How does McGrath justify his right to selectively judge when a scientific theory, no matter how well it is empirically confirmed, still can't practically rule out alternative (godly) explanations? Again, he leaves it a mystery how science can make theoretical progress by decisively ruling out unneeded hypotheses through empirical experimentation. If one science (geology) is entitled to being pretty sure that god isn't needed for explaining why fossils are found at the tops of mountains, why must another science (biology) never ever be able to rule out similarly unnecessary hypotheses about divine involvement when natural selection is explaining all the evidence?

Third, McGrath's difficulties with philosophy of science and the way that science does realistically rule out unneeded explanations helps to bring another major vulnerability into view. His curious selectivity about which scientific fields are capable of delivering genuine knowledge without hardly any theological re-interpretation, while other scientific fields will forever require paternalistic religious supervision, leaves his theology vulnerable to a historicist objection. Is McGrath's interpretative selectivity ultimately hostage to the vagaries of broader cultural drift? Imagine a sixteenth century theologian utilizing McGrath's style of theology: Copernican astronomy mustn't be taken realistically, but only as a mathematical 'model' unable to get nature right. Next, imagine an eighteenth century theologian applying McGrath's theology to disputes and dialogues of that day: Geology mustn't be taken realistically, due to its alarming natural explanations that omit the divinely-caused catastrophes mentioned in the Bible. The value of literal Biblical readings is not McGrath's priority, but that says more about today's mainstream Protestantism, rather than McGrath's theological cleverness. No, valuing humanity's dignity as a special divine creation remains McGrath's priority, a dignity lost to view from unguided evolution's perspective. But that's just his priority, today. Already some radical Christian theologians are finding plenty of human dignity in a natural process reaching for god rather than pushed

from behind by god. And secular humanists have no difficulty respecting human dignity in an entirely natural world.

The long march of cultural change leaves nothing untouched, not just god (as McGrath admits) or his “scientific theology” (as McGrath wouldn’t like to admit), but even his entire religion (which McGrath would hate to admit). The possibility that the Christian religion could become entirely satisfied with unguided natural selection may not be troubling McGrath’s nightmares, but stranger things have happened to any religion that survives for enough millennia. Could McGrath admit that those future Christians are just as reasonable believers too? Technically, McGrath’s interpretive individual theism must allow those future Christians to embrace a theological worldview they can live with, so no refutation looms here. McGrath doesn’t promise strict rationalist convergence on a uniquely specific god or theological system, after all. However, scientific atheology and a broader historical perspective can expose how McGrath’s defense of the ‘reasonableness’ of today’s Christians goes to the opposite extreme of being ultimately arbitrary, entirely hostage to changeable value priorities and unpredictable cultural drift instead of stable reason. McGrath is essentially demanding that Christian natural theology autocratically impose one cultural era’s balance of comfort with science upon all eras, irrespective of the knowledge or wisdom they might possess. That cultural autocracy attracts the notice of civic atheology and its respect for individual liberties, equality, and fairness. Only a grave injustice would be perpetrated on innocents, people trying to be as sincere Christians as McGrath himself, if natural theology’s capacity to advance with science got thwarted by the timid insecurities of past times. No, natural theology’s destiny is relativism, in a sense, as it remains dependent on the progressing science it must follow.

McGrath senses this relativistic destination ahead. He can’t bring himself to denigrate other religions as entirely deprived of truth. He also suggests that beauty and goodness guide our religiosity as much or more than truth. If religion amounts in the end to sublime poetry, as some great religious thinkers have suggested and McGrath himself intimates (McGrath 2011, 248-52), then atheology must drop its quarrel, for neither reason nor science set themselves up as arbiters of art. But art cannot regulate reason and science, either, so all this talk of a “scientific theology” by McGrath now amounts to sound and fury, signifying nothing. If McGrath wants to divert the theoretical debate over evidence to the philosophical question about what is good and right for humanity, moral and civic atheology are eagerly waiting for that engagement. All things considered, McGrath’s interpretive individual theism is hardly invulnerable to atheology.

Where the Gods go to Die

Atheists and theologians keep talking about the “god hypothesis.” The role of science needs to be tightly scripted in any “science vs. god” debate. Is god really a hypothesis to be compared against evidence just like any other hypothesis that science considers? Must we give each god the sort of consideration that a scientific hypothesis should receive? Perhaps not. The deities of folk religions are hardly so sophisticated as to be treated as anything like intellectual hypotheses, and they fall to textbook science at a touch. The sophisticated deities imagined to be busily occupying any gaps left by contemporary science can’t be scientific hypotheses, since their ‘confirmation’ counts entirely on nothing ever evidentially filling the gaps. The theological supernaturalisms resting content beyond all empirical evidence, ‘explaining’ all by explaining nothing, can’t be the subject matter of scientific hypothesizing either.

Science doesn’t need to treat deities as the least scientific. Science has killed off all sorts of paranormal and unnatural beings populating the mythic tales related by folk religions. Their devout adherents haven’t taken much notice, unsurprisingly, since it was only psychology and not reality perpetuating those fictions. Theologies have noticed the competition from science. Theologies taking the course of perpetuating ignorance and anti-science rhetoric lack credibility to speak intelligibly about science. No wonder they rely on social pressures to isolate followers away from science education. Followers should still think to ask why a good god would go to such great lengths to confuse honest inquiry. Where theologies instead seek compatibility with science, atheology closely scrutinizes the terms of compromise and finds them unacceptable. Scientific atheology stands opposed to “god in the gap” theologies, “god in the surprises” theologies, and “god in the world” theologies. This work of scientific atheology never has to ask science to take such a motley menagerie of gods to be scientific.

For its labors, scientific atheology isn’t really the place where the gods all go to die, either. Many crudely anthropomorphic deities have suffered dismissal at the hands of growing natural knowledge, to be sure. However, the same human imagination that created the gods can easily re-create them. Theology has re-cast its gods again and again, as it must, to carefully adjust the knowledge base supporting god’s existence. If theology must reject most or all of science, then god becomes a monstrously paternalistic deceiver, and moral atheology delivers the just verdict of unethical crimes against humanity. If theology spins delicate arguments defending a highly abstract deity, rationalist atheology’s refutations surround such gods with skeptical doubt. If theology only seeks god in the gaps left by science, god in effect becomes science’s creature, and nature controls the design of god instead of the other way around. If theology resorts to delimiting divinity to special processes and powers of nature, then atheology wouldn’t protest nature worship. If theology enslaves what may count as natural evidence to any era’s delicate sensibilities, then atheology demands compensatory justice for future generations of honest inquirers. If

theology throws divinity into utter mystery or poetic license, beyond all evidence and argument, then god's existence and influence quietly fades out, and atheology has found an ally.

Reason, science, philosophy, naturalism, and atheology are jointly pressuring theology to such extremes that scholars of religion are leaving the gods to their own fates in order to talk about anything else. As religious intellectuals join a chorus of voices protesting that religion was never really about gods anyways, their consensus with atheology that no real gods were involved is delivering a long-awaited sense of peace. It was always theology's destiny to help kill all the gods.

References

Aikin, Scott F., and Robert B. Talisse. 2011. *Reasonable Atheism: A Moral Case for Respectful Disbelief*. Amherst, N.Y.: Prometheus Books.

Barbour, Ian G. 2000. *When Science Meets Religion*. San Francisco, Cal.: HarperSanFrancisco.

Barnes, Michael H. 2000. *Stages of Thought: The Co-Evolution of Religious Thought and Science*. Oxford: Oxford University Press.

Bartholomew, David. 2008. *God, Chance, and Purpose: Can God Have It Both Ways?* Cambridge, UK: Cambridge University Press.

Berlinerblau, Jacques. 2012. *How to Be Secular: A Call to Arms for Religious Freedom* (Boston: Houghton Mifflin Harcourt.

Bridgstock, Martin. 2009. *Beyond Belief: Skepticism, Science and the Paranormal*. Cambridge, UK: Cambridge University Press.

Clayton, Philip. 2000. *The Problem of God in Modern Thought*. Grand Rapids, Mich.: Eerdmans.

Clayton, Philip. 2008. *Adventures in the Spirit: God, World, Divine Action*. Minneapolis, Minn.: Fortress Press.

Clayton, Philip, ed. 2004. *In Whom We Live and Move and Have Our Being: Panentheistic Reflections on God's Presence in a Scientific World*. Grand Rapids, Mich.: Eerdmans.

Clayton, Philip, and Paul Davies, ed. 2006. *The Re-emergence of Emergence: The Emergentist Hypothesis from Science to Religion*. Oxford: Oxford University Press.

Clarke, David S. 2003. *Panpsychism and the Religious Attitude*. Albany: State University of New York Press.

Cobb, John B. Jr., and Clark H. Pinnock, ed. 2000. *Searching for an Adequate God: A Dialogue Between Process and Free Will Theists*. Grand Rapids, Mich.: Eerdmans.

Cohen, I. Bernard. 1985. *Revolution in Science*. Cambridge, Mass.: Harvard University Press.

Cudworth, Ralph. 1678. *The True Intellectual System of the Universe: The First Part; wherein, All the Reason and Philosophy of Atheism is Confuted; and its Impossibility Demonstrated*. London: for Richard Royston.

Dawes, Gregory W. 2009. *Theism and Explanation*. London and New York: Routledge.

Drees, Willem B. 1996. *Religion, Science and Naturalism*. Cambridge, UK: Cambridge University Press.

Edis, Taner. 2006. *Science and Nonbelief*. Westport, Conn.: Greenwood.

Epstein, Greg. 2009. *Good Without God: What a Billion Nonreligious People Do Believe*. New York: HarperCollins.

Everett, Nicholas. 2004. *The Non-Existence of God*. London and New York: Routledge.

Flew, Antony. 1976. *The Presumption of Atheism*. London: Pemberton; New York: Harper and Row.

Frazier, Kendrick, ed. 2009. *Science Under Siege: Defending Science, Exposing Pseudoscience*. Amherst, N.Y.: Prometheus Books.

- Giere, Ronald N. 2006. *Scientific Perspectivism*. Chicago: University of Chicago Press.
- Hamburger, Philip. 2002. *Separation of Church and State*. Cambridge, Mass.: Harvard University Press.
- Howison, Colin. 2011. *Objecting to God*. Cambridge, UK: Cambridge University Press.
- Kasher, Asa, and Jeanine Diller, ed. 2013. *Models of God and Alternative Ultimate Realities*. Dordrecht and New York: Springer.
- Kenny, Anthony. 1969. *The Five Ways: St. Thomas Aquinas' Proofs of God's Existence*. New York: Schocken.
- Kosso, Peter. 2011. *A Summary of Scientific Method*. Dordrecht and New York: Springer.
- Kurtz, Paul. 1987. *Forbidden Fruit: The Ethics of Humanism*. Amherst, N.Y.: Prometheus Books.
- Kurtz, Paul, ed. 2001. *Skeptical Odysseys: Personal Accounts by the World's Leading Paranormal Inquirers*. Amherst, N.Y.: Prometheus Books.
- Ladyman, James, and Don Ross. 2007. *Every Thing Must Go: Metaphysics Naturalized*. Oxford: Oxford University Press.
- Larue, Gerald. 1996. *Freethought Across the Centuries*. Amherst, N.Y.: Humanist Press.
- Leiter, Brian. 2013. *Why Tolerate Religion?* Princeton, N.J.: Princeton University Press.
- Lindberg, David C., and Ronald Numbers, ed. 2003. *When Science and Christianity Meet*. Chicago: University of Chicago Press.
- Martin, Michael. 1990. *Atheism: A Philosophical Justification*. Philadelphia: Temple University Press.

McGrath, Alister. 2011. *The Open Secret: A New Vision for Natural Theology*. Malden, Mass.: Wiley-Blackwell.

McGrath, Alister, and Joanna Collicutt McGrath. 2007. *The Dawkins Delusion? Atheist Fundamentalism and the Denial of the Divine*. Downer's Grove, Ill.: InterVarsity Press.

McGrath, Alister. 2002. *A Scientific Theology, volume 2: Reality*. Grand Rapids, Mich.: Eerdmans.

McGrath, Alister. 2010. *Science and Religion: A New Introduction*. Malden, Mass.: Wiley-Blackwell.

McGrath, Alister. 1999. *Science and Religion: An Introduction*. Malden, Mass.: Blackwell, 1999.

Moreland, James P. 2008. *Consciousness and the Existence of God: A Theistic Argument*. London and New York: Routledge.

Nielsen, Kai. 2001. *Naturalism and Religion*. Amherst, N.Y.: Prometheus Books.

Oppy, Graham. 2006. *Arguing about Gods*. Cambridge, UK: Cambridge University Press.

Philipse, Herman. 2012. *God in the Age of Science? A Critique of Religious Reason*. Oxford: Oxford University Press.

Pigliucci, Massimo. 2010. *Nonsense on Stilts: How to Tell Science from Bunk*. Chicago: University of Chicago Press.

Pigliucci, Massimo, and Maarten Boudry, ed. 2013. *The Philosophy of Pseudoscience*. Chicago: University of Chicago Press.

Plantinga, Alvin. 1967. *God and Other Minds: A Study of the Rational Justification of Belief in God*. Ithaca, N.Y.: Cornell University Press.

Polkinghorne, John C. 1998. *Belief in God in an Age of Science*. New Haven, Conn.: Yale University Press.

Polkinghorne, John C. 2009. *Theology in the Context of Science*. New Haven, Conn.: Yale University Press.

Russell, Robert, Ted Peters, and Nathan Hallanger, ed. 2006. *God's Action in Nature's World*. Aldershot, UK: Ashgate.

Saunders, Nicholas. 2002. *Divine Action and Modern Science*. Cambridge, UK: Cambridge University Press.

Shook, John R. 2010. *The God Debates: A 21st Century Guide for Atheists and Believers (and Everyone in Between)*. Malden, Mass.: Wiley-Blackwell.

Shook, John R. 2011. "Varieties of Twentieth Century American Naturalism," *The Pluralist* 6.2: 1–17.

Shults, F. LeRon, Nancey Murphy, and Robert Russell, ed. 2009. *Philosophy, Science and Divine Action* (Leiden, The Netherlands: Brill.

Sobel, Jordan. 2003. *Logic and Theism: Arguments for and against Beliefs in God*. Cambridge, UK: Cambridge University Press.

Stenger, Victor. 2010. *God, The Failed Hypothesis: How Science Shows That God Does Not Exist*. Amherst, N.Y.: Prometheus Books.

Swinburne, Richard. 2004. *The Existence of God*, 2nd edn. Oxford: Oxford University Press.

Trigg, Roger. 1998. *Rationality and Religion: Does Faith Need Reason?* Malden, Mass.: Blackwell, 1998.

Wallace, B. Alan. 2007. *Hidden Dimensions: The Unification of Physics and Consciousness*. New York: Columbia University Press.

Wegter-McNelly, Kirk. 2012. *The Entangled God: Divine Relationality and Quantum Physics*. London and New York: Routledge.

Whitaker, Andrew 2006. *Einstein, Bohr and the Quantum Dilemma: From Quantum Theory to Quantum Information*. Cambridge, UK: Cambridge University Press.

Wiebe, Donald. 1991. *The Irony of Theology and the Nature of Religious Thought*. Montréal, Canada: McGill-Queen's University Press.

Young, Matt, and Taner Edis, ed. 2006. *Why Intelligent Design Fails: A Scientific Critique of the New Creationism*. New Brunswick, N.J.: Rutgers University Press.