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Bridging Ideological Divides: Why Christians Still Disagree About Evolution and What We Should Do About It

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Abstract. Why do creationists persist in rejecting the evidence for Darwin's theory of evolution? This paper explores longstanding disagreements among Christians over the epistemic status of evolution. Like other studies that have tried to define the evidence for evolution, a recent analysis by Gijsbert van den Brink, Jeroen de Ridder, and René van Woudenberg does not adequately confront antecedent commitments that play into any assessment of evolution. The scientific theory of evolution involves higher-level models that are associated with a range of non-scientific factors, including exegetical and theological judgments. In light of these realities, an emphasis on mutual dialogue and understanding offers promising opportunities for Christians trying to discover the truth about God's creation.

Keywords: evolution, epistemic status, evidence, creationism, common ancestry, scientific models.

Introduction

Stephen Jay Gould speaks for mainstream scientists when he says that evolution is a fact (Gould 1981). Theodosius Dobzhansky implied the same in his observation that nothing in biology makes sense except in the light of evolution (Dobzhansky 1973). It would seem that no sane, unbiased person could reasonably question the evidence supporting evolution.

Yet creationist dissent is a persistent sociological reality, not just in North America, but globally (e.g., Numbers 2006; 2009; Blancke, Hjermitslev, and Kjærgaard 2014). Young-earth creationists are not alone in resisting the consensus, for old-earth creationists of all stripes and Christian evolutionists disagree with the standard naturalistic renditions of evolutionary theory. The Intelligent Design (ID) movement, for example, positions itself as a big tent for all these perspectives as they churn out a steady stream of scholarship united in its skepticism toward mainstream evolution (e.g., Meyer 2013; Moreland et al. 2017). The same skepticism thrives in historically evangelical academic settings, especially in their seminaries and in some of their colleges and universities.

But the tide has shifted in recent decades. The BioLogos Foundation, established by Francis Collins in 2007 with a Templeton grant, has been widely influential through their research, conferences, and online media, in promoting the harmony between evolutionary science and Christian faith. They spearheaded a book series with IVP Academic—BioLogos Books on Science and Christianity—carrying titles that support evolutionary creation. The first volume in the series, edited by Kathryn Applegate and Jim Stump, showcased well-known pastors and scholars giving personal narratives of how they became convinced of evolution (Applegate and Stump 2016). Another volume in the same series is co-written by five professors at Wheaton College, *Understanding Scientific Theories of Origins*, and reflects the same consensus on evolutionary creation (Bishop et al. 2018). These volumes sample a growing body of evolution-affirming literature, not to mention organizations like the American Scientific Affiliation (ASA), the Faraday Institute, Christians in Science, and

affiliated journals like *Perspectives on Science and Christian Faith* (PSCF) and *Science and Christian Belief* (SCB).

Despite these trends, Christians still disagree about evolution. Pastors and tenured professors have lost their jobs over these issues. Book contracts have been withdrawn because publisher and author assess evolution differently. At the bottom of these often-agonizing conflicts one usually finds disparate judgments about the epistemic status of evolutionary science. Can we know that evolutionary theory is true much like we know that gravity or the germ theory of disease are true?

In this paper, we argue that this conflict of interpretations underscores the key role of philosophical and theological commitments in shaping how we evaluate scientific claims and determine the epistemic status of evolution. Assessments of the scientific evidence for evolution that do not adequately address the religious dimension leave Christians entrenched in their factions. We begin by examining a recent analysis of the evidence for evolution by three scholars affiliated with a Christian university in the Netherlands. After noting some shortcomings, we argue that the scientific theory of evolution involves higher-level models that are shaped by non-scientific factors. We then show that theological commitments—held not only by Christians but by non-theists as well—affect those higher-level models that influence our epistemic assessment of evolution. Since such precommitments lead to very different estimations of the scientific support for evolution, the final section of the article encourages a new kind of dialogue as a way forward for Christians pursuing Christ in the midst of disagreement.

1. The epistemic status of evolution

The evidence for common ancestry includes the fossil record, comparative anatomy, embryology, genetics, and geographic species distribution, while natural selection gains support from natural and laboratory work, including computer simulations and mathematical models (McCain and Weslake 2013, 106). Given that these multiple independent lines of evi-

dence for evolution seem so compelling, few scientists actually invest the time in calculating this evidence (van der Meer 2013, 89–93).

However, the philosopher of science Elliott Sober lays out three ways to frame the epistemic status of evolution (Sober 2008). The first is *Bayesianism* which calculates the strength of belief that one ought to place in any given scientific hypothesis; the second is *likelihoodism* where one determines the degree to which competing scientific hypotheses are favored by the evidence; and the third *frequentism*, which names a group of related positions, among them model-selection theory that tries to estimate "how accurately a model will predict new data when it is fitted to old" (Sober 2008, 82). These three strategies cover the main options in the literature and the general consensus is that evolution is highly probable (or even undeniable). Yet none of these strategies consider the epistemic relevance of theology (e.g., see Theobald 2010; Sober and Steel 2015; Sober and Steel 2017).

One exception is a recent analysis by van den Brink and his colleagues who work at the Vrije Universiteit in Amsterdam (van den Brink et al. 2017). They begin with the uncontroversial claim that the evidence for a scientific theory increases according to "how well it is confirmed, how much support and evidence there is for it, how well it has withstood criticism and testing, to what extent it manifests theoretical virtues like simplicity, broad scope, unifying power, explanatory power, and internal and external coherence" (van den Brink et al. 2017, 455). They also adopt a framework from the philosopher Roderick Chisholm (1977) that lays out a spectrum of epistemic attitudes that we can have towards a theory (in decreasing order of confidence)—

1) *absolutely certain*: mathematical or logical truths (e.g., 2 + 2 = 4),
2) *evident*: everyday propositions (e.g., I have two hands; yesterday was sunny),
3) *beyond reasonable doubt*: firmly established scientific theories (e.g., Einstein's theory of general relativity; quantum mechanics),[1]

[1] The phrase "beyond reasonable doubt" is Chisholm's term of art, i.e., that it is more reasonable to accept a theory than to withhold judgment. As van den Brink et al. explain, the phrase "has no implications about *how much* more reasonable accepting is than withholding. Perhaps it is only slightly more reasonable" (469n11). Some theo-

4) *acceptable*: theories with a respectable but not firmly established level of evidence (e.g., string theory),
5) *presumption in its favor*: such theories have some positive evidence in their favor but not enough to reach rational acceptability (e.g., new scientific theories that are untested but are consistent with the data).

Scientific theories with little evidence lie at the negative end of the spectrum. Such theories invite epistemic attitudes of *presumption against its favor*, or worse, *unacceptable* or *gratuitous*.

Gijsbert van den Brink and his colleagues distinguish three different layers of evolutionary theory, namely, 1) historical evolution, 2) common descent, and 3) natural selection.[2] They conclude that multiple, mutually reinforcing lines of evidence for historical evolution render it strongly beyond reasonable doubt. The evidence for common descent, they argue, is also strong though less than the evidence for historical evolution ("weakly beyond reasonable doubt"). They give the lowest evidential score to natural selection, given notable scientific disagreements about its importance in evolution (van den Brink et al. 2017, 466–68). Most scientists would agree with these conclusions.

In a post-Kuhnian world, some Christians exploit antirealist claims about the fallibility of science to rule out any positive epistemic status for evolution. Since many past theories have turned out to be false, they argue that current scientific theories are likely false as well (Laudan 1981). Although van den Brink and his co-authors reject scientific positivism, they raise two concerns with this anti-evolutionary strategy. In the first place, when new theories replace old ones, core elements within the old theory persist despite the change: "Newer theories typically retain significant elements from older ones. So to the extent that a theory has been around for a long time and its core elements retained, we have good reason to think it has strong epistemic status" (van den Brink et al. 2017, 458).

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ries, then, are *strongly* beyond reasonable doubt, while others are only *weakly* beyond reasonable doubt.

[2] By "historical evolution," they mean "[t]he claim that the geological timescale is more or less correct and that the earth has seen a historical sequence of life forms stretching over many millions of years" (van den Brink et al. 2017, 459).

In the second place, even after the Kuhnian paradigm shifts, "scientists never simply return to superseded theories or paradigms. After all, they had good reasons to abandon them" (van den Brink et al. 2017, 458). Accordingly, creationists will find no solace in a post-Kuhnian philosophy of science: "even the staunchest critic of evolutionary theory should admit that a straightforward return to, say, a young earth creationist paradigm is out of the question" (van den Brink et al. 2017, 458).

Although we agree with the scientific realism of van den Brink et al., we question their response to anti-realist skepticism about evolution. They adopt the standard argument for realism, namely, that core elements are preserved from the old to the new theory. However, that move may be less secure in light of P. Kyle Stanford's "problem of unconceived alternatives" (Stanford 2006). Stanford argues from the history of science that, "we have repeatedly found ourselves encouraged or even forced under the impetus provided by recalcitrant phenomena, unexpected anomalies, and other theoretical pressures to discover *new theories that had remained previously unconceived despite being well confirmed by the evidence available to us*" (Stanford 2006, 19, our emphasis; see also Stanford 2017). Earlier scientists were convinced that their theories were the best explanation of the data, but retrospectively we now know that better theories existed. Scientists at the time were simply unable to conceive those theories. Stanford's argument is that scientists today are in the same epistemic boat. In our view, van den Brink et al.'s realist argument is potentially vulnerable to Stanford's antirealism.

Furthermore, their claim that scientists never return to superseded theories—and, therefore, scientists today should never return to superseded theories—is questionable on two counts. First, a historical observation cannot deliver a normative conclusion; their normative judgment needs a separate argument, which they do not provide. Second, the historical observation itself is questionable. For example, modern scientists accepted Hume's eighteenth-century rejection of Aristotelian science with its fourfold causation. Natural scientists have long dismissed causal powers as spooky unscientific concepts, yet Aristotelian science is resurgent in the 21st century (e.g., see Teh, Koons, and Simpson 2018). This

particular development at least tempers the authors' categorical argument against superseded theories.

More importantly, however, their essay's overall thesis oversimplifies the epistemic challenge. The opening sentence of their abstract reads: "The theory of evolution continues to be a bone of contention among certain groups of theistic believers" (van den Brink et al. 2017, 454). Given this focus, it is surprising that they do not offer an epistemological analysis of how creationists evaluate the evidence for evolution. Instead, the authors merely assert what creationists deny. But background theological assumptions play a key role in assessing the evidence for evolution. In fairness, they do at one point concede "that if someone believes on independent grounds that proper interpretation of the Bible forces us to accept a young earth, this will affect the epistemic status attributed to Historical Evolution and, by extension, to evolutionary theory's other layers" (van den Brink et al. 2017, 462). This comment is good as far as it goes, but it deserves more explicit and extended analysis when probing the epistemic status of evolution.[3]

2. The structure of evolutionary theory

The construction of scientific models involves not only the examination of data but also incorporates previously existing theories, knowledge, and even prejudice. Scientists do not simply "explain" data with a theory; they propose explanations within already existing paradigms of knowledge that guide research and dictate what is an acceptable scientific explanation.

Take the case of Charles Darwin. He claimed that no one would believe evolution had taken place unless we had a viable mechanism to explain *how* evolution could happen; common descent as a model of the origin of species, he argued, "would be unsatisfactory, until it could be shown how the innumerable species inhabiting this world have been modified" (Darwin 1859, 3). Darwin thus wrote the *Origin of Species* from the bot-

[3] In van den Brink's defense, he has made his own theological commitments much more explicit in an important monograph (van den Brink 2020).

tom up, arguing that the details of variation and natural selection could explain the vast array of evidences that support evolution. Many modern presentations of evolution follow the same organization and reasoning (see Ridley 2009; Stearns and Hoekstra, 2005; a notable exception is Futuyma 2009). But Darwin's claim misrepresents his own personal journey. He first accepted evolution based on what he had observed in the Galapagos Islands and in South America on the voyage of the *Beagle*. Only later, after reading Malthus, did he latch onto natural selection as the primary mechanism to explain evolution. Darwin was *already* convinced of evolution before he devised an explanation for how it might have happened (Browne 1995).

Similarly, historical reactions to the *Origin of Species* contradict Darwin's argument. By 1875, most scientists accepted that the diversity of life on earth had evolved from common ancestors over deep time, but it was not until the 1930s and the emergence of the Neo-Darwinian Synthesis that scientists finally agreed on the mechanism for evolution. From 1875 to 1930, a period some have dubbed the "eclipse of Darwinism" (Bowler 1983), scholars regularly entertained other mechanisms like orthogenesis (an internal drive to evolve) and Lamarckian inheritance of acquired characteristics. Scientists did not unanimously accept Darwin's mechanism, though they agreed that life had arisen through a process of evolution. Ironically, both Darwin and modern creationists make the same mistake when they assume that the mechanism must be understood before evolution and universal common ancestry are to be persuasive.

In Darwin's personal life and in the historical reception of his theory, models of how evolution occurs were formulated within an existing commitment to common ancestry and the historical development of living things. Acceptance of evolution did not (and probably still does not) involve merely observing variations in populations of living things and imagining what they might produce over thousands of generations. *Common ancestry acts as a higher-level model that coordinates and supports more directly empirical models (like natural selection) within or beneath it.* In other words, scientific theories and models exist in a hierarchy with respect to the data they wish to explain. The theory of common ancestry

coordinates many other layers of intervening theoretical constructions such as natural selection or specific models of phylogenetic relationship, all of which change frequently. In reality, common ancestry as a general principle long antedated Darwin, most famously in the 1844 publication of Robert Chambers' *Vestiges of the Natural History of Creation*. The fact that common ancestry was accepted during the eclipse of Darwinism indicates that scientists could accept this higher-level model *independently* of any details of how common ancestry came to be.

It is only at the lowest level where theories deal directly with fine-scale observations that the epistemic status of theories turns largely on how well they explain empirical data. In such cases, a theory that explains more data is preferable to one that explains less; hence scientists keep refining how they understand evolutionary relationships and mechanisms. Scientists may conceive of their theories as "true" or "false," but historically the vast majority of scientific theories have turned out to be false. What is accepted as true today will be superseded as new information comes to light and new methods are devised. At higher levels, where we find concepts like common ancestry and the historical development of living things, theories are more resilient, robust, and resistant to change.

Consequently, one can assess common ancestry and other higher-level theories according to criteria *outside* science narrowly understood. For example, one might admire a higher-level theory for its elegance or simplicity; mathematicians and cosmogonists often praise the beautiful simplicity of their theories (e.g., see McAllister 1996). In addition, we often use models to explain disparate data that we might not otherwise expect to be connected, and this coordinate explanation of different observations is known as consilience of induction (the consilience of common ancestry and evolution is celebrated in Wilson 1999). Finally, other sources of pre-existing knowledge, including outright prejudice, can influence our assessment of a scientific model. In the history of evolutionary theory, visceral objections to the animal ancestry of humanity often hindered the acceptance of common ancestry (Wasmann 1909).

Evolution, then, should not be seen as three relatively discrete components: historical evolution, common ancestry, and natural selection.

Rather common ancestry is a core, controlling model that affects the epistemic status of lower-level, specific theories like natural selection. The higher-level theory of common ancestry explains the anatomical and genetic similarities between species as well as the fossil record and the geographical distribution of species. Common ancestry can therefore draw support from theories of comparative anatomy, molecular homology, paleontology, and biogeography. However, empirical inconsistencies with any of these lower-level theories will not necessarily invalidate common ancestry. Empirical theories about natural selection in Darwin's finches or the phylogenetic relationships of whale fossils have an epistemic status that is largely incidental to the epistemic status of common ancestry.

Therefore, it is difficult to articulate the epistemic status of evolution precisely due to the influence of unexamined, nonscientific factors on our judgments about higher-level scientific models. Among these nonscientific factors are *theological* considerations that impinge on how anyone evaluates the epistemic status of scientific models. In our view, van den Brink and his colleagues do not adequately grapple with this point. They recognize that "a theory's epistemic status is relative to the available evidence at a given time and place" (van den Brink et al. 2017, 455). By the phrase "available evidence," they mean any evidence that is "published, widely accessible, and widely endorsed in mainstream scientific outlets" (van den Brink et al. 2017, 455). From a Christian perspective, however, the theological interpretation of Scripture is directly relevant to the epistemic status of certain scientific claims (for contrasting perspectives, see Wolterstorff 1984; Madueme 2024). The fact that some view evolution and Christianity as compatible and mutually supportive while others find varying levels of tension or even contradiction between the two suggests there is more afoot with the epistemology of evolution. We now turn to these questions.

3. Evolution without theological presuppositions is impossible

Dogmatic commitments inevitably shape our overall judgments of the epistemic status of evolution. Theology is the epistemic linchpin. A brief

survey of thinkers from a range of perspectives brings this dynamic to light (although we limit our focus to Protestant opinion—since that is the tradition we know best—a similar analysis could be made of Roman Catholic thinkers, e.g., see Caruana 2009; Blancke 2013).

Consider Jonathan Sarfati, a young-earth creationist, who thinks that there is no substantial evidence for evolution. At every point, his understanding of the biblical witness shapes his interpretation of the natural data. One of his axioms, for instance, is that God's once-perfect original creation deteriorated after the fall of Adam and Eve. This leads him to disagree with evolutionists who interpret so-called imperfect structures as evidence for evolution. Sarfati categorizes those structures as the effects of post-fall deterioration—or, alternatively, human misinterpretations of God's perfect design (Sarfati 1999, 33–34). His response to conventional conclusions about deep time displays the same dynamic. Sarfati's *antecedent* belief—based on his understanding of Scripture—that the earth is about 6,000 years old shapes his critique of the uniformitarian assumptions of geology (Sarfati 1999, 103–107). Background theological beliefs are always controlling his epistemic assessment of evolution.

Ken Ham's writings reflect the same principle. Any judgments about the epistemic status of evolution are inseparable from Ham's theological preunderstanding. His particular conception of inerrancy obliges him to interpret the data in light of what he thinks the Bible teaches about origins, leaving him skeptical about many of the conclusions of the mainstream scientific community. As Ham (2017, 19) writes, "Without the biblical revelation about the cosmos-impacting fall of man, the creation gives a confusing message about the Creator." He aims most of his skepticism at *historical* as opposed to *experimental* sciences, a distinction that he leverages to expose the conflict he perceives between Scripture and the historical sciences (i.e., geology, evolution, and allied disciplines) (Ham 2017, 31–34; Ham 2012, 45–52).

Although C. John Collins rejects Ham's skepticism toward the historical sciences (Collins 2003; 2013, 237–42), antecedent theological commitments nonetheless shape his epistemic assessment of evolutionary theory. Collins engages the scientific questions with "a hierarchy of com-

mitments" derived from Scripture. Non-negotiable beliefs like the Trinity and the Resurrection, as well as other less central doctrinal beliefs, set boundaries on the kinds of scientific conclusions he deems acceptable. These beliefs serve as both freedoms and limitations for the Christian (Collins 2013a, 167–75; see also Collins 2013b, 19–28).

Others like the fellow old-earth creationist Hugh Ross affirm the ancient dictum that God has spoken in two books. As Ross summarizes, "God's Word (Scripture) and God's world (nature), as two revelations (one verbal, one physical) from the same God, will never contradict each other" (from Reasons to Believe's "Our Mission & Beliefs" statement, under the "Creation" heading, at http://www.reasons.org/about). Any aspect of evolutionary theory that contradicts Scripture, rightly understood, has no epistemic value and should be rejected. The two books cannot contradict each other; according to Ross, "God's 'two books' will prove consistent internally, externally, and mutually. … Neither negates or undermines the other" (Ross 2017, 71). To that end, Ross proposes a model of creation that is scientifically testable but uses biblical texts to referee which scientific theories are in and which ones are out (Ross 2006; Rana and Ross 2004).

From a radically different perspective, Denis Lamoureux denies that the Holy Spirit intended Scripture to be scientifically concordant in any sense. Scripture is a divinely accommodated text that reflects the ancient (and mistaken) scientific views of the original human authors (see also Lamoureux 2008; 2016). Still, his intellectual pilgrimage reveals that the Bible has shaped his thinking to such an extent that his study of Scripture drove him away from his former young-earth creationism (Lamoureux 2009, 22–23; 2013, 40–42; 2016a, 13–24; 2016b, 143–52). Despite Lamoureux's arguments against the Bible playing any role in scientific judgments, theological reasoning was formative in his epistemic valuation of evolution.

Theological factors also inform evolutionists who deny God's existence. In the famous words of Richard Dawkins, "Darwin made it possible to be an intellectually fulfilled atheist" (Dawkins 1986, 6). However, atheists and agnostics are just as liable to employ theological assumptions in their claims about evolution. In his *Origin of Species*, Darwin consciously

framed his argument for evolution against "the view which most naturalists entertain, and which I formerly entertained—namely, that each species has been independently created" (Darwin 1859, 6). Several theology-laden arguments were instrumental to his epistemic claims about evolution, including the idea that natural evil impugns the God of classical Christianity (Barlow 1958, 90; also, Dilley 2012). Even atheist Jerry Coyne cannot avoid reasoning theologically when he assumes that God, if he exists, must have created "from scratch like an architect designs buildings" (Coyne 2009, 54). Coyne regards the fossil record as the most compelling evidence for evolution, and he contends that this data point supports evolution over divine design.

In any assessment of the epistemic status of evolution, scientific judgments and theological assumptions are entangled in messy ways. Some thinkers are driven by science to reinterpret Scripture and the received tradition; the direction of influence is largely from science to faith (for one example, see Walton 2015; for a critique of Walton's approach, see Madueme 2016, 175–83). Others are more willing to allow dogmatic commitments to challenge or even disqualify parts of the scientific consensus. Here the degree of resistance to scientific conclusions usually correlates with how one perceives the significance of the threatened doctrine. North American evangelicals, for example, have historically felt less threatened by an ancient cosmos than by the idea of human evolution. This pattern explains why young- and old-earth creationists, who in earlier generations opposed each other, often unite when defending a historical Adam (see the essays in Madueme and Reeves 2014; granted, some have tried to reconcile evolution and a historical Adam, e.g., Swamidass 2019. In contrast, the Intelligent Design movement avoids theological disputes in order to unite against naturalism—see Dembski 1998, 13–14; Dembski 1999, 247–252).

In short, theology plays an integral role in the epistemology of evolution. Some epistemic judgments depend on how one evaluates the clarity of nature against the clarity of Scripture. Young-earth creationists tend to foreground the perspicuity of Scripture and the fallibility of science, while theistic evolutionists tend to emphasize the clarity of science

and the ambiguity of exegesis. These are generalizations; exceptions and middle-ground positions are plentiful (e.g., see Livingstone 1987; Gundlach 2013). On the exegetical front, biblical scholars often appeal to the ancient Near Eastern context or to Galileo's formulation of accommodation, strategies that open up greater consonance between Scripture and mainstream scientific accounts (e.g., see Walton 2009; Hilber 2020). Other concerns including the role of common grace, the relationship between special and general revelation, and the criteria for establishing dogmatic rank are also inescapable. Beneath them all lies the ancient meta-question of how faith relates to reason.

4. Beyond segregation to real dialogue

Given the close ties between theological and philosophical commitments and how one evaluates evolution epistemically, it's no surprise that evolution debates often involve sincere people talking past each other. Almost thirty years ago, Del Ratzsch observed the same phenomena of straw men and propaganda, which he attributed to the tribalism of people with radically different assumptions (Ratzsch 1996). At the same time, evidence and religious motivations interact in complex and surprising ways. Religious and even evangelical scholars increasingly embrace evolution, which belies the stereotype of the "atheistic evolutionist" (e.g., Lamoureux 2009; Collins 2006; Venema and McKnight 2017). Another stereotype—the "illiterate creationist"—is hard to reconcile with an emerging group of "post-secular" Americans known for high scientific literacy, skepticism of evolution, and devotion to religion (O'Brien and Noy 2015). Despite this complicated relationship between motivations and evidence, we still maintain that assessments of the epistemic status of evolution must include theological considerations.

If our analysis holds up, one might ask if it is possible to evaluate the evidence for evolution in a theologically "neutral" way. We agree with scientific realists that the objective data in creation should inform any assessment of evolution, but the process of interpreting the data should

also entail theological judgments. Disagreements between Christians over the epistemic status of evolution correlate with their different assumptions on a range of theological issues (e.g., the nature of Scripture; the possibility of a biblical chronology; the historical character—or lack thereof—of Genesis 1–11; the relationship between sin and physical death; etc.). Each group will draw conclusions about the evidence that fit best with antecedent theological judgments. That does not mean that figuring out the epistemic status of evolution is a futile exercise, but it is not straightforward either.

In our view, this challenge opens up fresh opportunities to engage fellow Christians with whom we disagree, even though many reject the very concept of such engagement. The rhetoric is all too common among non-Christian scientists: Creationists are "dishonest" (Prothero 2009, 55), "a real danger" (Pennock 2000, xviii), and so on. They should not be engaged in public debate lest their arguments gain publicity and their organizations receive more donations (Edwords 1982; Bybee 2000; Bartelt 2004, 30–31; Dawkins 2003, 219–21). While such attitudes are not surprising, similar sentiments are rife among Christian scholars.

For example, according to Gordon (2014, 169), "For those of us outside the young-earth community—evangelical or not—who are scientifically literate or even just educated as critical thinkers, it is difficult to overstate how profoundly absurd young-earth science strikes us as being." Based on our own experience, Gordon's attitude is common within Christian (including evangelical) academia, though it is often expressed privately rather than in published works. The same dismissive attitude is all too common among young-earth creationists and many creationist apologetics ministries; by their lights, evolutionists are "fundamentally atheistic" (Morris 2002, 91), "irrational" and "amoral" (MacArthur 2001, 5), etc. Given such boorish attitudes toward people with whom we disagree, why would anyone want to dialogue?

Why indeed, but God has unambiguous things to say here. The Lord Jesus teaches that the two central obligations of every Christian are to love God and neighbor (Matt. 22:36–40). "All the Law and the Prophets hang on these two commandments" (v. 40). This high calling to love our neigh-

bors may seem trifling to evangelicals who, historically, have emphasized distinctives in an effort to ward off doctrinal declension. The injunction to love God and neighbor seems too bare-boned, imprecise, and perhaps inadequate. "Non-evangelical liberals, non-Christian theists, non-theistic adherents of other faiths, and nonreligious humanists may affirm one or both of these commandments" (Williams 2000, 173). Thus, we evangelicals find group identity and security in our confessions, doctrinal statements, and ideological consortiums. But this style of Christianity, cautions Stephen Williams, "misleads us all too often into equating the distinctive with the essential" (Williams 2000, 173). In many of our confessional evangelical traditions, we can end up favoring dogma over ethics which results in "our ethical thought [being] proportionately underdeveloped in relation to our doctrinal thought" (Williams 2000, 173). Love of God and neighbor are a salutary corrective, a balm of Gilead to an imbalanced doctrinalism; indeed, the two commandments are the lifeblood of the Christian life.

Lest we be misunderstood, our point is not that doctrinal differences are unimportant or that dialogue should trump conviction. After all, confronting doctrinal error is commonplace in the New Testament, from John's counsel to test the spirits (1 John 4:2–3) to Paul warning the Galatians not to turn to another gospel (Gal. 1:9). Arguably, much of Paul's ministry was appealing to Scripture to lead people into the truth (Acts 17:1–4; Gal. 2:11–14; Col. 2:8–23; 2 Tim. 3:16). Jude's letter opens with a plea to contend for the faith that was once for all delivered to the saints (Jude 3). Jesus, of course, saved his harshest rebukes for the doctrinal errors of the Pharisees, Sadducees, and other religious hypocrites (e.g., Matt. 23). Nevertheless, when confronting and correcting, our words must come from the right motive. As Rhyne Putnam (2020, 258) writes, "Correction is for the building up of the individual or party in the wrong (2 Tim. 3:17), not for acclamation or scoring points. It must also be epitomized by kindness, gentleness, and forgiveness (Eph. 4:32; Prov. 15:1)." The way we treat each other even amidst deep disagreements is a mark of how much we love God.

Aye, there's the rub. Engaging in dialogue with brothers and sisters who disagree about evolution is not easy, but it is an ethical imperative.

The very act of evaluating evolution is an invitation to such dialogue. Because if evolution is a fact, as Gould and others suggest, what epistemic status could we ever expect other than certainty? Obviously, no one would stop to consider the epistemic status of gravity or the beauty of sunset moths. The very act of contemplating the epistemic status of evolution suggests that people are, at some level, uncertain, or they at least recognize that many in the church are uncertain. It is therefore worth pondering the factors that underlie such uncertainty, including distinctive theological concerns.

Indeed, there are good reasons to engage with those who hold radically different perspectives, not least of which is practical necessity. Personal interactions with ideological opponents are difficult to avoid; for example, Christian evolutionists who attend churches that have adopted an anti-evolution position often feel spiritually neglected and marginalized, the genuineness of their faith constantly under suspicion. As another example, teachers regularly encounter creationist students in their classes. Ignoring or silencing such students is ill-advised, and treating them poorly only contributes to their perception of "evolutionists" as enemies. As Douglas Allchin noted,

> Ironically, the solution to creationism may not be primarily more or better teaching of evolution itself, at least not in the current environment. The targets should be, instead, profiling the basic dimensions of knowledge, or epistemology; developing social relationships that nurture educational trust; and addressing evolution and moral order. Only then will students be ready for meaningful evolution—and science—education. (Allchin 2013, 146)

We tend to dismiss those with whom we disagree, treating them disdainfully and sometimes escalating the conflict to actual coercion. Even Dawkins's zealous advocacy of atheism has boundaries of propriety, as he indicated in *The God Delusion*: "such hostility as I or other atheists occasionally voice towards religion is limited to words. I am not going to bomb anybody, behead them, stone them, burn them at the stake, crucify them, or fly planes into their skyscrapers, just because of a theological disagree-

ment" (Dawkins 2006, 281–82). If we don't want to convince by coercion, we must find a better path of interaction.

Beyond the practical considerations, there are other reasons to engage ideological opponents. In the North American context, the polarized and fractured political climate illustrates how sinful division can fester in the absence of ideological interaction. Sober reflection on the consequences of ideological segregation should motivate us to cultivate the true discipline of dialogue. In his seminal work on science and religion, Ian Barbour described dialogue as an interaction *between* science and religion, and those following in his path bring together scientists and theologians for collaborative interactions (Barbour 1997). However, we are advocating a neglected and perhaps more important form of dialogue between *people* who hold starkly different convictions about the interaction of science and religion.

True dialogue of this type is rare. Examples include Jason Rosenhouse's efforts to experience creationist culture firsthand (Rosenhouse 2012), ongoing interactions between the creationists of Reasons to Believe and evolution advocates from the BioLogos Foundation (Keathley, Stump, and Aguirre 2017), and the dialogue between Todd Wood and Darrel Falk sponsored by the Colossian Forum (Wood and Falk 2019). To our knowledge, no one has changed their personal convictions because of these interactions, but as Rosenhouse observed,

> It is far more difficult to caricature and stereotype people you have actually met. Have a few conversations over lunch or during breaks at conferences, and suddenly they are no longer abstractions or types. They are no longer defined by a few odd beliefs you have heard that they hold. They become actual people, with depth and personality and reasons for the things they believe. Insularity is a two-way street. (Rosenhouse 2012, 15)

The insularity that Rosenhouse speaks of leads to ideological segregation and ultimately infra-humanization and dehumanization of those unfamiliar to us. Research by Iyengar and Westwood has shown an increase in the ideological segregation of American voters, accompanied by growing feelings of resentment and hostility towards those holding other

views (Iyengar and Westwood 2015; Webster 2020). Anecdotal evidence of dehumanization between creationists and evolutionists abounds. Stereotyping of evolutionary scientists by creationists is so widespread it needs no documentation. On the other side, Rosenhouse's book records several encounters that dispel classic stereotypes of creationists. In one instance, Rosenhouse notes, "People often ask if I have ever felt physically threatened at a creationist conference. The answer is no, never, not even once" (Rosenhouse 2012, 13).

Dialogue with ideological opponents can be spiritually and intellectually enriching. It encourages us to more faithfully embody the gospel of Jesus Christ and to treat others as we ourselves would like to be treated (Matt. 7:12). In the words of Roger Nicole, "what we owe that person who differs from us, whoever that may be, is what we owe every human being—we owe them *love*" (Nicole 2002, 10). As we attempt to express our beliefs to those who strongly disagree, we also gain a greater appreciation of the strengths and weaknesses of our own positions. We discover how difficult it can be to communicate what seems so obvious to us. In facing ideological "enemies," we cannot simply ignore open questions in our own position, as we might be tempted to do with members of our own tribe. Intellectual antagonists hold us accountable for those open questions and unsolved problems. Individuals who care about the truth ought to desire interactions with those who think differently, especially if we are Christians.

Conclusion

Gijsbert van den Brink and his colleagues have made a timely assessment of the epistemic status of evolution. Our concerns with their analysis—and with others like it—are not so much in what they say, though there is plenty to argue with there, but in what is left unsaid. They preach to the choir. Christian evolutionists will find their views vindicated, and both young- and old-earth creationists will remain unmoved. This stalemate does not imply that natural data are worthless. Natural data matter! However, the data are not self-interpreting; they are framed within the

broader non-scientific, philosophical, and theological commitments that we bring to them. Unless these higher-level factors are taken far more seriously and honestly, the raw scientific data are in danger of becoming trivialized into something like a Rorschach blot.

We have presented two options. We can discuss the epistemic status of evolution exclusively within our respective tribes and affirm what we already "know" to be true, or we can bridge ideological divides and ask the more difficult question of *why* our ideological opponents see evolution so radically differently. The former road is easier in the short term, but the latter journey yields more lasting benefit—despite all its travails—not only for Christians and their ecclesial communities, but also for the common good.[4]

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