

Young Earth Creationism: An Evolution of Myth

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Abstract

Creation myths are an integral part of every culture and religious tradition. To some extent, *creationist* could refer to any adherent who recognizes their particular creation story as true or finds “the thesis that the world’s structure and contents can be adequately explained only by postulating at least one intelligent designer, a creator god” to be compelling.¹ However, *how* God created the universe is a point of contention and mass division for Christians rife with theological, philosophical, and scientific concerns. Finding prominence in the latter half of the twentieth century, Young Earth Creationism (YEC) is a powerful antievolutionary force speaking for some half of Americans and on the rise in other parts of the world. The purpose of this paper is to conduct a comprehensive analysis of YEC in the context of the relationship between religion and science. The centerpiece of the paper will be an in-depth review of the Answers in Genesis (AiG) Creation Museum in Petersburg, Kentucky, including interviews with the staff and founders.

Introduction

The following is a cross-disciplinary approach to the phenomenon of YEC spanning three disciplines. A religious studies approach is applied to the historical context of religious movements such as fundamentalism and biblical inerrancy. Considerations of creationist theology and interpretation of text are then analyzed and juxtaposed with the development of evolutionary thought. Philosophically, concern is placed on the implications the YEC movement has for the relationship between religion and science. An anthropological and ethnographic approach is applied to explore the above concerns with a visit to the AiG Creation Museum utilizing interviews and observations made. This multidiscipline approach is intended to offer insight into a controversial and often misunderstood phenomenon.

Literature Review

There are a number of essential pieces of literature in both source material and scholarly commentary on the movement itself. *The Genesis Flood* by John Whitcomb and Henry Morris brought YEC and flood geology into the mainstream in 1961 and almost every major work of antievolution released thereafter is indebted to its publication. Ken Ham’s *The Lie: Evolution*, appearing in 1987, encapsulates the aims and intentions of the current generation of YEC. Literature from the AiG Creation

Museum, including promotional material and pamphlets such as Dr. Georgia Purdom's *Natural Selection: Not the Same as Evolution* are examined throughout.

Scholarly commentary on the subject is numerous but the most essential is Ron Numbers's *The Creationists: The Evolution of Scientific Creationism*. This massive work contains in-depth biographies of the most important figures within the movement and is admirable in its objectivity. It is so fair that coauthor of *The Genesis Flood* and pioneer of the movement, Henry Morris, praises it on the back cover of the first edition saying, "whether evolutionist or creationist, this book is a rich mine of historical insight." Mark Issak's *The Counter Creationism Handbook* is a one-stop guide to the most prevalent creationist claims featuring rebuttals from the scientific community. For a nonreligious take on the subject, I turned to the classicist David Sedely's *Creationism and Its Critics in Antiquity* to explore a philosophical approach to teleology and the notion of a "creator god."

A variety of concepts within the field of religious studies are incorporated to delve further into the movement. Most notably, *The Fundamentalism Project*, a five-volume collection of scholarly essays edited by Martin Marty and Scott Appleby, is mentioned while exploring fundamentalism. The definition of *fundamentalism* found in the text, a "militant opposition to aspects of modernity that can be found in all or at least many religious groups," is employed to suggest that YEC does not quite fit the description. I then introduce an excerpt from James R. Moore's article "The Creationist Cosmos of Protestant Fundamentalism" from Volume 2 of the series, *Fundamentalisms and Society: Reclaiming the Sciences, the Family and Education*, to give further support to this controversial notion that YEC is not an example of fundamentalism—at least, not entirely. For an understanding of myth as well as scholarly criticism to biblical literalism in a religious studies and classicist context I turned to Mark Zvi Brettler's *How to Read the Bible*, Mircea Eliade's *Myth and Reality*, and Marcus J. Borg's *Reading the Bible Again for the First Time: Taking the Bible Seriously but Not Literally*.

Briefly, I explore the relationship between religion and science in the writings of Richard Dawkins and Daniel Dennett. This allowed for an exploration of the extreme and polarizing view of the relationship. To balance it, the writings of Stephen Jay Gould were an abundant source of inspiration. Finally, the fourfold classification of the religion and science relationship suggested by Ian Barbour served as an anchor whilst weathering the storms of "scientism" and the more sympathetic view of "nonoverlapping magisterium." In terms of scripture, the King James Bible was utilized as it is unanimously endorsed by YEC as the most authentic translation. For issues on translation, such as the meaning of the Hebrew word for day, *Yom*, I turned to the *New Interpreter's Bible*.

Contemporary commentaries on creationism and conspiracism in general, such as Charles P. Pierce's *Idiot America: How Stupidity Became a Virtue in the Land of the Free* and Jonathan Kay's *Among the Truthers: A Journey through America's Growing Conspiracist Underground*, provided further insight.

Breaking It Down

The specific brand of creationism known as YEC has only been in the mainstream for the past half century. The 1961 publication of *The Genesis Flood* paved the way for YEC, striking a chord with fundamentalist Christianity while introducing a new kind of antievolution to the mainstream. Aside from a minority mostly made up of Seventh Day Adventists, creationists in the time of Darwin and during the Scopes trial subscribed to various forms of Old Earth Creationism (OEC), which accepted the findings of geology and the antiquity of the earth.² Here, the incompatibility between evolution and the Bible was not necessarily dealt in the specific details of a literal

creation but in larger issues of philosophy and theology, most notably special creation and the fixity of species.³

While the treatment of creationism in the press and in rebuttal from evolutionists (as they are referred to by creationists) would give the impression that there is one unified creationist force wreaking havoc on the scientific community, creationism represents a variety of distinct movements, founded on mutually exclusive claims of theology and interpretations of scripture.⁴

YEC and OEC both regard the Bible as the perfect and inerrant word of God. Despite the same input, the output is different in that they disagree about what the Bible says about the age of the earth. The reason is two tiered; one is a matter of theology and the other of the history, or “evolution,” of creationist thought. In terms of theology, the meaning of the Hebrew word *Yom* is disputed. YEC insists that the word *Yom* denotes one literal 24-hour day while OEC argues that special attention must be paid to the context. Throughout the Hebrew Bible, *Yom* represents a variety of passages of time including days, years, seasons, and immeasurable passages of time such as “ever” and “ago.” Even within the creation account, there are three separate uses of *Yom*.⁵ The flexibility of the interpretation of *Yom* allows for an old earth to be compatible with inerrancy and YEC regards this as a flawed interpretation. Historically, the biblical justification for a young earth dates back to Bishop James Ussher and possibly before. It then disappeared and remained disconnected from antievolution and biblical creationism during the time of Darwin and the Scopes trial. Inspired by the teachings of charismatic prophet Ellen G. White of the Seventh Day Adventist Church, George Mcready Price (b. 1870) was convinced that Genesis could only be interpreted as a six 24-hour day creation and that other interpretations that made room for metaphor and gaps of time were deeply flawed.⁶ Price’s ideas in *The New Geology* influenced a young seminarian named John Whitcomb and hydraulic engineering professor Henry Morris. Together, they brought flood geology to the mainstream with the 1961 publication of *The Genesis Flood*.

Science and Myth

YEC is determined to present Genesis as historically accurate and compatible with modern science. Biblical literalism itself is a rather modern development in Christianity and as utilized by YEC, has tremendous implications to the classicist notion of myth. To scholars, Genesis falls under the genre of myth, a classification of writing style consisting of a “traditional tale with secondary, partial reference to something of collective importance” (Burkett 1979). In the battle against evolution, YEC has marked science as a form of intellectual currency, perceived as more valuable than myth. In 2009, Kurt Zimmerman, a parent from Knoxville, Tennessee, raised concern over the high school biology text *Asking about Life* for describing the Judeo-Christian creation story as a myth. Zimmerman found grounds to take the case to court because not only was labeling the foundation of Christianity as myth offensive, it raised concern over bias in the textbooks.⁷ The irony is that under the scholarly definition of myth, no support for factual and historical accuracy is necessary and there is nothing offensive about it. As eloquently put by Marcus J. Borg in *Reading the Bible Again for the First Time*, “Myths use nonliteral language; in this sense, they do not narrate *facts*. But myths are necessary if we speak at all about the world’s origin and destiny in God. We have no other language for such matters.”⁸

This concludes what I would consider to be the conflicts between evolution and creation that are the result of misunderstandings. The classicist definition of myth and scientific definition of theory have been confused with their colloquial meaning on numerous occasions and this miscommunication is largely responsible for the

creation/evolution controversy. This is important and a crucial aspect in analysis, but it represents only one facet of the conflict. The following delves deeper into the relationship between science and religion and the complexity of YEC theology juxtaposed with biblical literalism, fundamentalism, and the history of evolutionary thought.

Misconceptions and Curveballs

Any effort to make a literal and historical account of Genesis compatible with modern science is bound to create complications. In effect, spokespeople of both magesteria have been very vocal about the phenomenon. Believers take issue with the literal and historical interpretation of scripture that serves as YEC's foundation because it compromises its power as an allegory and trivializes faith.⁹ Not to mention, holding a literalist standard across the entire Bible can prove to be problematic and inconsistent.¹⁰ To scientists of a wide array of religious stripes, the assertion that YEC is doing actual science is as insulting as it is dangerous, sparking an unnecessary debate.¹¹ Amongst historians and philosophers of science as well as theologians and scholars of religion, YEC presents a challenge as religion is turned into science and vice versa. To make sense of YEC and its position on creation, evolution, and dinosaurs it would be useful to compile a list of misconceptions about the phenomenon. Equally important is the recognition of “curveballs”—subtle inconsistencies between YEC and fundamentalism, the framework that has been utilized by scholars as an explanation for biblically based evolution denial.

Misconception #1

Antievolution Is a Distinctly American Phenomenon

Stephen Jay Gould argued that creationism was a “peculiarly American phenomenon” (1999), and by this he surely means that YEC could *only* have occurred in America. More recently, in *Idiot America: How Stupidity Became a Virtue in the Land of the Free* (the paperback edition features a rather humorous illustration of George Washington saddled up on a T-Rex), journalist Charles P. Pierce suggests that this kind of “idiocy” is geographically and culturally distinctive. The notion that YEC is a uniquely American phenomenon has given comfort to many; “At least it’s not happening anywhere else,” they say.

This notion has been dismantled on numerous occasions by historian of science Ron Numbers in *The Creationists: The Evolution of Scientific Creationism* (1992) and *Galileo Goes to Jail: And Other Myths about Science and Religion* (2009). Of course, there is a degree of truth to this “myth.”¹² According to a recent poll, Americans doubt evolution more than any other industrialized nation except Turkey (Hecht 2006). With consideration to landmark court cases such as the Scopes trial of 1925, *Edwards v. Aguillard*, and the evolution wars over the teaching of intelligent design in Dover, Pennsylvania, in 2005, it’s easy to see why the focus has been on America. However, this is not necessarily the case.

It is all too easy to imagine YEC and antievolution in general as the sum of an equation: Christian fundamentalism and scientific illiteracy in America. Add them together and the sum is a unique brand of American-bred antiscience, born out of scientific ignorance and emphatically encouraged by rigid fundamentalism. In some cases, perhaps many, this may be true but does this mean that YEC is distinctly American? Predominantly? Yes. Distinctly? No. Creationism is on the rise, globally. Though AiG is headquartered in America, its founder, Ken Ham, began his journey to creationist superstar status abroad. In 1994, AiG was founded by Ham (b. 1951), an Australian schoolteacher who began his crusade against evolution in defense of the

Bible in 1978 founding the Creation Science Foundation with physician Carl Weiland. Ham eventually left to join the Institute for Creation Research with the fathers of the movement, John Whitcomb and Henry Morris.

Even in Darwin's birthplace of the United Kingdom, alternatives to the theory of evolution have been increasingly popular citing, "four out of ten people in the United Kingdom think that religious alternatives to Darwin's theory of evolution should be taught as science in schools with twenty-two percent citing creationism as best supporting their views."¹³ Similarly, YEC speaks for 21.8 percent of Switzerland, 20.4 percent of Austria, and 18.1 percent of Germany (Numbers 2009).

Misconception #2

Proponents of YEC Are Scientifically Illiterate and Ignorant

In some cases, this is not a stereotype. In the late 1980s and early '90s, Kent Hovind (b. 1953) was *the* YEC proponent and arguably the most influential antievolutionary force of his or any generation before and since. Purposely releasing videotapes and other literature without a copyright, Hovind was a pioneer of the YEC movement, assembling a massive following in a pre-Internet age. What made Hovind such an antievolutionary powerhouse was his vivaciousness in setting foot behind enemy lines, infamously challenging leading scientists of numerous fields on the subject of evolution to sold-out public debates at thousands of universities.

Borrowing techniques from Duane Gish, Hovind would pummel the opposition with questions that they couldn't answer, leaving the impression that Darwinism was a farce—a religious "faith" so flimsy it inevitably collapsed under scrutiny.¹⁴ The infamous "Hovind Challenge" awarded \$250,000 to anyone who could prove macroevolution: the creation of a universe and all physical laws *ex nihilo* without God.¹⁵

The problem was that Hovind was not a scientist nor did he hold any scientific credentials and his lack of understanding of basic scientific concepts shone through in his arguments. His Ph.D. was in Christian education, a degree he obtained from the now-defunct Patriot Bible College, a university without accreditation and a reputation for being a "doctorate mill." In 2006, Hovind was convicted on 58 counts of tax fraud for the proceeds attributed to his Dinosaur Adventure Land in Pensacola, Florida.¹⁶ Hovind is not the only creationist to have lost favor within the creationist community. Most notably, Carl Baugh (b. 1936), the discoverer of the Paluxy River footprints in Glenn Rose, Texas, has been criticized. AiG has urged creationists to stay away from many of Baugh and Hovind's arguments because they're either fallacious or lack credibility.¹⁷

Then consider the case of David Menton, whom I had the privilege of speaking to for almost three hours at the Creation Museum. Menton graduated from Brown University with a Ph.D. in molecular biology, taught at Washington State School of Medicine for 30 years, and spent much of his scientific career keeping a secret from his colleagues—he thought Darwin's theory of evolution was ridiculous.

Menton has spent the latter part of his career challenging the hallmarks of evolutionary thought, including the shared genetic material of chimps and humans and, most famously, a detailed critical analysis of Lucy, the infamous australopithecine found by Donald Johanson in Hadar, Ethiopia, in 1974.¹⁸ With clever titles for lectures and presentations such as "Lucy: She's No Lady" and "Evolution: Not a Chance," Menton is undoubtedly the most engaging speaker AiG has to offer. Unlike Hovind, Menton is mild-mannered and pleasant and his talent to draw in a crowd rests in his enthusiasm for the subject rather than polemic charisma.

The entire staff of lecturers and researchers at AiG boast equally impressive credentials. Dr. Jason Lisle has a Ph.D. in astrophysics from the University of Colorado and is one of the most popular speakers at the museum. Dr. Lisle is also in charge of the museum's planetarium which, for a few dollars more, can greatly enhance the visitor's experience. Dr. Georgia Purdom holds a Ph.D. in molecular genetics from Ohio State University and, according to the AiG website, is the only female Ph.D. scientist engaged in full-time speaking and research for a biblical creationist organization in North America.¹⁹ One of the most successful campaigns in antievolution has been in convincing the public that evolution is falling out of favor with scientists and that YEC represents a paradigm shift in how we think about origins.

However, this trend does not go very far. According to a 1991 Gallup poll, only 5 percent of scientists in America were creationists. This includes engineers, computer scientists, etc., whose expertise is not relevant to the study of evolution. When taking into account the relevant fields such as the earth and life sciences of which 480,000 were polled, only 700 considered creationism to be a valid scientific theory, which drops it down to approximately .15 percent (Robinson 1995).

Curveballs in Fundamentalism

As defined by scholar Martin Marty, fundamentalism is the “militant opposition to aspects of modernity that can be found in all or at least many religious groups.”²⁰ In *The Fundamentalism Project*, historian of science James R. Moore describes YEC as being separate from both traditional, non-literal creationism and modernity: “The creationist cosmos is thus held to be at daggers-drawn not only with scientific modernity but also with the theology of the majority of those who call themselves creationists” (1993).²¹ Though YEC is mostly compatible with Marty's definition of fundamentalism, there are subtle differences, or “curveballs.” There is a symbiotic relationship between YEC and the scientific community—the criticism creationists receive from scientists inspires modifications to their position to build up immunity to the attacks and, in turn, alters the framework of fundamentalism. The result is a decidedly unique approach to the relationship between science and religion.

First Curveball

To YEC, there is no incompatibility between the word of God and modern science. In fact, they are one and the same. The only incompatibility is between God's word and the theory of evolution. Of course, one could argue there really is no curveball being thrown here, citing YEC as pseudoscience, clearly at odds with modernity and mistaken about the constituents of good science. This, however, would miss something crucial—the way in which evolution is rejected and science is not. The AiG Creation Museum was conceived and constructed with this in mind: to offer a competing worldview to the theory of evolution that is not an alternative to, but on par with, modern science. Proponents of YEC do not exist in an enclave sheltered from the demons of modernity; they want to be a part of modernity in challenging conventional wisdom they perceive as fallacious.

Second Curveball

Literary foundation for the fundamentalist movement is found in *The Fundamentals: A Testament to the Truth*, a 12-volume attack on liberal theology and higher criticism published by A.C. Dixon and R.A. Torrey from 1910 to 1915. Inerrancy is a doctrinal belief that the Bible is the inspired and therefore perfect word of God, which is also one of the five fundamentals laid out during the General Assembly of the Presbyterian Church in 1910.

For YEC, the Word of God is inerrant not only because it has to be by definition, but also because science has revealed it to be true. In other words, the Bible is *so* perfect and *so* inerrant that it is more appropriate to align it with scientific fact than religious belief. “Science,” says AiG, “confirms the Bible.”²² Though it is believed that the Bible is true and inerrant, its truth and inerrancy are not dependent on faith. Science has *confirmed* the inerrancy of scripture and belief in it is a position based on evidence, not belief. Taking a cue from over a century of secular criticism, faith and belief are cast in a negative light to demonize evolution as a religion that is divorced from scientific evidence.²³

Third Curveball

It is in this distinction that the biggest curveball is thrown. The problem of discerning the relationship between science and religion has elicited a number of scenarios in which the two relate.²⁴ Stephen Jay Gould has suggested that science and religion are compatible because they are asking different questions and therefore summon different answers.²⁵ While theistic evolutionists would argue for a common ground between religion and science, YECs ironically have more in common with atheists and ultradarwinists who promote the conflict hypothesis, a militant allegiance to the prestige of science and denigration of religion. To quote Kent Hovind, “We believe the Bible is literally true and scientifically accurate and the evolution theory is the dumbest and most dangerous religion in the history of planet earth.”²⁶ YEC regards the Bible as compatible with the findings of modern science and any incompatibility is not a scientific but religious one, brilliantly reimagining and positioning the theory of evolution in the mold imprinted on the cultural subconscious by past apparent conflicts of science and religion.

The title of this paper is *Young Earth Creationism: An Evolution of Myth* and is meant to be as provocative as it sounds. The suggestion is that the perception of the creation narrative of Judeo-Christian creation myth has analogously evolved. Cultural points of pressure to accept the theory of evolution as compatible with creation have elicited a strong and transformative reaction. With the theory of evolution’s implications of humanity’s place in the natural world so strong, analogy and metaphor proved insufficient as truth. As the theory of evolution became widely accepted in both scientific and religious circles, a historical account of scripture as well as a rational defense of it became a necessity in a way it could not have been in any other period.

The Creation Museum

In late August 2010, I journeyed to Petersburg, Kentucky, to visit the Creation Museum with my friend, a science education major who had concerns about how he was going to approach these issues as an educator. The museum, opened in 2007 by AiG, has one major goal in mind: to provide a wealth of information for Christians to defend creation. The Creation Museum is a \$27 million, 72,000 square foot state-of-the-art complex located in Petersburg, Kentucky, just 12 miles away from the Cincinnati International Airport.²⁷ The concept isn’t new; there are a number of creation museums with the similar objective as AiG in the United States and Canada, though they are much smaller in scale. There is the Creation Evidence Museum in Glen Rose, Texas, founded by Carl Baugh; The Museum of Earth and Creation History founded by the Institute for Creation Research; and a traveling museum founded by Ian Juby.²⁸

Before our journey through biblical history, we had the fortune of spending a few days at our campsite, Big Bone Lick State Park. Also known as the Birthplace of American Paleontology, Big Bone Lick is the home of legendary excavations including

mammoth, mastodon, bison, and sloth remains from the Pleistocene epoch. While we were checking in, an employee in the gift shop asked us what brought us all the way from Wisconsin to Kentucky. We explained that our interest in creation and evolution had brought us to Petersburg to see the Creation Museum for ourselves. The gift shop proprietor shared with us that since its opening in 2007, a majority of their campers were visitors to the Creation Museum. The state park is roughly 15 minutes away from the museum and because it is so convenient in both price and location it serves as a perfect campground for traveling families to stay at while visiting the museum. Of course, conflicts ensued when the camping creationists found out that the campsite they were staying at was evolution friendly. Details were minimal but one can imagine the response “millions of years” elicited from campers who had just received an endless supply of ammunition in defending their faith “biblically and scientifically.”²⁹

I called the museum two weeks in advance and was honest in my intentions—to visit the Creation Museum as a student who was interested in the relationship between religion and science. We told them when we would be arriving, and the staff as well as cofounder Mark Looy were wonderfully cooperative in arranging interviews, giving tips that would make our experience the most beneficial, and even personally tracking me down when an employee realized she had overcharged me for my ticket to the planetarium earlier in the day.³⁰ As a paying customer, I thought the Creation Museum was definitely worth the trip and cost. Food and concessions are reasonably priced, even more affordable and of better quality than some of the local restaurants we stopped at, and the facility is impressive with many of the exhibits being designed by a former Universal Studios artist (hence the realistic animatronic dinosaurs that looked distinctly “Spielbergian”).³¹

The Seven Cs of History

We began by taking a “Walk through Biblical History,” which was formatted by the Seven Cs of History: Creation, Corruption, Catastrophe, Confusion, Christ, Cross, and Consummation. The Seven Cs of History represent the history of the world from a biblical perspective, which follows a timeline starting from the beginning of creation 6,000 years ago. “The Walk through Biblical History” is meant to represent the entire earth’s history, from Genesis 1:1 to Revelation 22:21.³² What must be understood here is that YEC rejects both the scientific community’s consensus on the age of the earth as well as other forms of creationism such as Gap Creationism, Day-Age Creationism, and Intelligent Design.³³

Of the many pamphlets and pieces of literature I collected, there was one in particular that had an enormous impact. In response to the Christian Clergy Letter Project, the pamphlet features a sinister-looking illustration of Charles Darwin with the text “12,000 churches support the teaching of evolution in schools. How will YOUR church decide?”³⁴ The entire purpose of establishing the Seven Cs is a reaction to theistic evolution, protecting the Word of God and ensuring no room for millions of years to slither its way in.

Exhibits

“The Garden of Eden” was possibly the largest exhibit on display at the museum and definitely the most elaborate. It looked the way I had always imagined it, a perfect tropical paradise. However, there were some details that had not been a part of my Catholic upbringing. For instance, alongside Adam in the Garden of Eden were all the land animals that, according to Genesis 1:24, God made in accordance to their own kind.³⁵ Amongst these animals were dinosaurs, deer, kangaroos, penguins, and, as an obvious biting of the thumb toward evolution, a lowly chimpanzee. Questions raced

through my head. I understood the place of dinosaurs and that, because it was before sin entered the world, the dinosaurs were not carnivorous and were much like pets, docile and gentle.³⁶ The one that I could not wrap my head around was the penguins. Penguins, which live almost exclusively in the southern hemisphere and are highly adaptive toward cold and aquatic living, seemed out of place in a tropical paradise. How could a species whose traits are so useful to their current geographic location be frolicking in a tropical environment where their adaptations were certainly a disadvantage? It is true that some penguins such as the Galapagos Penguin (*Spheniscus mendiculus*) can live in warmer climates but these appeared to be Emperor Penguins (*Aptenodytes forsteri*) which are endemic to Antarctica. How the penguins survived on the ark without a proper cooling system installed, technology that was certainly not available in the Bronze Age, remains a mystery.

At the museum, and true of YEC in general, is an effort to distinguish between macroevolution and microevolution. Natural selection is recognized separately from the theory of evolution in that there are changes *within* species rather than between them, appealing to the term *kind*, which appears 10 times in Genesis 1. Dr. Georgia's pamphlet *Natural Selection: Not the Same as Evolution* demonstrates what I referred to earlier as a symbiotic relationship between the criticism from the scientific community and creationist arguments against evolution. The pamphlet features a fictional conversation between a creationist and an evolutionist in which the latter's ignorance is graciously apprehended by the former on confusion between "molecules to man" evolution and natural selection. Purdom urges creationists not to throw the baby out with the bathwater arguing that forms of natural selection, such as antibiotic resistance, are distinct from evolution as a whole and compatible with Genesis.³⁷

The "Culture in Crisis" exhibit is one of the most effective exhibits at the museum. We walked down a paved road and on each side were faux windowsills with a video screen playing staged scenes on a loop, depicting the "dangers of evolution"—a dissent from absolute truth into apathy and moral relativism.

In one window, a teenage boy is surfing Internet porn (no actual porn is on the screen, just a black screen with XXX in bold red letters), rolling a joint, not doing his homework, and disobeying his mother. In another window, a girl is on the telephone discussing with a friend if she should go through with getting an abortion, and, finally, a woman is shown entertaining a man who is not her husband. Tying it all together is an image of a preacher sympathizing with theistic evolution and "millions of years." In the same way that Adam and Eve were disobedient, man has replaced the Word of God with his own philosophy. Thus, the war between YEC and evolution is not a disagreement about science or religion but the inevitable consequence of our sinful nature.

Dinosaurs and Creation

The theological argument for the coexistence of dinosaurs and man is to assure consistency between the Genesis account of land animals being created on the sixth day and the discoveries of dinosaur fossils in the nineteenth century. Instead of denying their existence, dinosaurs are embraced and woven into the Hebrew Bible. Citing the creature Behemoth, which appears in Job 40:15–24, and Leviathan from Job 41, the AiG Creation Museum reports no contradiction between the existence of dinosaurs and a six 24-hour literal day creation 6,000 years ago. Most importantly, dinosaurs incorporated into a creationist view of history serve as a harsh slap in the face to evolution. "We're putting the evolutionists on notice: We're taking the dinosaurs back," says Hamm.³⁸ No room for middle ground, YEC declares the Bible as incompatible with evolution, and dinosaurs are just one of the many chess pieces that find themselves

on both sides of the board. “The evidence is the same,” we were consistently reminded at the museum, but “our starting points determine our worldview.”

On the second day at the museum we attended a lecture by Mike Riddle, an intimidating presence and charismatic speaker. Tall and athletic, the former U.S. Marine and track star spoke to a packed auditorium with the lecture “Taking Back America’s Education.” Like a general organizing a war strategy, Riddle described the American education system as being in peril, corrupted by the dangerous *religion* of evolution. Riddle’s impassioned battle cry electrified the auditorium as he spoke of “what they don’t tell you” about evolution, evidence that if exposed would blow the evolution theory to smithereens.³⁹ Permeating throughout and pulsating within, YEC is the promise of hidden knowledge that has been censored from the culture.⁴⁰

This is a common theme within YEC and conspiracy theories in general—that authority cannot be trusted. In Jonathan Kay’s *Among the Truthers: A Journey through America’s Growing Conspiracist Underground*, the case is laid out that conspiracy theorists are “driven by a need to smash the façade of conventional reality and existing power structures.” It doesn’t matter if their arguments are debunked because once the rug is pulled out from under their feet it further justifies the existence of a malevolent force that will stop at nothing to silence the truth.

A Memory of Eden

The purpose of this paper is neither to criticize nor defend. Rather, its purpose is to clarify and explain a phenomenon that serves as a unique addition to an already diverse canon; scholarly and theological efforts to make sense of Genesis in light of the theory of evolution within the context of the relationship between religion and science. Though there are clearly points of criticism and defense throughout, persuasion of any particular position is not the objective. Hopefully, the information presented as well as the account of my experiences at the AiG Creation Museum will cause the reader to carefully consider the religious, scientific, and philosophical implications of the phenomena.

The gut reaction is to diagnose it; as a specifically geographic and cultural phenomena, as an example of religious fundamentalism, or as the result of scientific ignorance. These classifications provide strong correlation but all prove to be inconsistent. Analyses aside, YEC remains a cross-cultural peculiarity; a syncretistic anomaly that parts ways from both a scientific understanding of the world and traditional religious thought while simultaneously occupying both domains.

We are fortunate enough to be alive in a most scientifically advanced age where knowable facts about the universe can be attained by anyone with an Internet connection and a library card. Yet, there is a great divide. The opinions on evolution and the age of the earth expressed by roughly half of the United States (and as demonstrated by Ron Numbers, a significant amount of non-Americans) would suggest a decidedly alternate reality.⁴¹ While pining for a paradise that has been taken away, proponents and adherents of YEC are complacent in remembering a world that was. YEC is a memory, one whose origin is ineluctably of contemporary construction.

Notes

1. As defined by Devid Sedley in *Creationism and Its Critics in Antiquity*.
2. In Darwin’s time, the earth was thought to be very old but there was not an established consensus until 1956. In the late nineteenth and early twentieth centuries, the age of the earth varied from 20–40 million years to 2–3 billion. Further, theologians in Darwin’s time such as George Fredrick Wright argued for the compatibility between theism and evolution.
3. “Kinds” as described by Genesis is used to distinguish between natural selection and evolution.

4. Ultra-Darwinists such as Richard Dawkins and Daniel Dennett have not only attacked creationism, they have attacked religion as a whole, citing it as wishful thinking and anti-science. See Dawkins' *Unweaving the Rainbow* and Dennett's *Darwin's Dangerous Idea*.
5. Genesis 1:5, 1:14, and 2:4 refer to *day* in different ways: a 24-hour period (Genesis 1:5); days, as in more than one (Genesis 1:14); and in Genesis 2:4, *Yom* can be translated to the expression "In the Day of the Lord." There is debate amongst scholars. Hebrew scholar Gerhard Von Rad argues that *Yom* represents 24-hour literal days, while Terrence E. Freeman suggests that the author of Genesis "highlights not individual days but the seven-day pattern."
6. Ellen G. White was the leader of the Seven Day Adventist movement who "claimed to receive messages in trancelike visions and whose pronouncements Adventists placed on par with the Bible" (Numbers 1992).
7. This article was selected to demonstrate the significant amount of confusion over concepts of science and theology that are often the foundation for conflicts between evolution and creationism.
8. Marcus J. Borg, *Reading the Bible Again for the First Time: Taking the Bible Seriously but Not Literally* (New York: Harper Collins, 2001), 71.
9. Francis S. Collins's book *The Language of God* criticizes YEC as "distorting science and doing the most damage to faith by demanding that belief in God requires assent to fundamentally flawed claims about the natural world" (2006).
10. Does Isaiah 41:10 mean God's right arm *literally* lifts up the nation of Israel? Or does John 15:5 *literally* mean that Christ is the vine and we are the branches?
11. Though they may disagree on issues of philosophy and theology, both believing and secular scientists have collaborated in such organizations as The Clergy Letter Project and the National Center for Science Education.
12. Here, myth is meant only in its colloquial sense: a falsehood.
13. Taken from the anthology *Galileo Goes to Jail: And Other Myths about Science and Religion*.
14. Duane Gish (b. 1921) was a biochemist with a Ph.D. from Berkeley. His debate techniques were dubbed by Eugenie Scott as "The Gish Gallop," which is described as "spewing forth torrents of error that the evolutionist hasn't a prayer of refuting" (talkorigins.org/faqs/debating/globetrotters.html).
15. An overview of the criteria for the "Hovind Challenge" can be found on talkorigins.org.
16. Easily the most recognizable of all YECs, Kent Hovind was convicted of 58 charges of tax evasion regarding the profits from his Dinosaur Adventure Land in 2006 (NCSE 2006).
17. A hallmark of YEC in America, the Paluxy footprints in Glenn Rose were hailed as evidence of a dinosaur and man coexistence. Upon investigation, the prints were found conclusively to be a hoax showing points of deliberate alteration (Godfrey 1985; Hastings 1988). Interestingly, many creationist ministries including AiG have abandoned the Paluxy footprints, appearing on their "Arguments Creationists Should Not Use" section of their website, answersingenesis.org.
18. In my physical anthropology classes, Johanson's discovery was treated as the *coup de gras* of all excavations and finds of hominins, standing for an integral step in the journey of man. To YEC however, it represents a hoax, citing that Lucy was fully ape.
19. In the biography section of the AiG website (answersingenesis.org).
20. *The Fundamentalism Project* (Marty and Appleby 1995).
21. James R. Moore's "The Creationist Cosmos of Protestant Fundamentalism" is an admirable work by a brilliant scholar, though I disagree with creationism being an example of pure fundamentalism.
22. In promotional DVDs, literature, and throughout the museum tour, Lisle and Ham stressed the consistency between what the Bible teaches and modern science.
23. The onslaught of the new atheism movement has criticized faith as willful ignorance. Interestingly, YEC has taken this as a cue, categorizing atheists and evolutionists as close-minded and ignorant of the evidence in favor of creation.
24. Originally proposed by Ian Barbour in 1990, a fourfold classification for the relationship between science and religion includes Conflict, Independence, Dialogue, and Integration. From *Philosophy of Religion: An Anthology* (Pojman and Rea 2008).

25. Non-overlapping Magisteria suggests that science and religion are not in conflict because they are concerned with different fields of inquiry.
26. This became a mantra on Hovind's *Creation Science* radio program and during his lectures. Despite losing credibility within the community, Hovind's influence is unparalleled.
27. The location is also of interest because it is close to the majority of the country. In an interview with the *Sydney Morning Herald*, AiG founder Ken Ham said, "One of the main reasons we moved there was because we are within one hour's flight of 69 percent of America's population" (smh.com.au/news/Paul-Sheehan/Onward-the-new-Christian-soldier/2005/01/16/1105810774805.html). The reasons for this location are not economic- or business-oriented, but an effort to make YEC available to all.
28. Ian Juby's website can be found at ianjuby.org. A member of Mensa, a high IQ society that represents less than 2 percent of the population, Ian Juby developed a special interest group involving other Mensa members who support YEC.
29. "Powered by Answers in Genesis," the I Am Not Ashamed project is the world's "first online video Bible," which allows believers all around the world to upload videos of themselves quoting scripture and defending their faith. The name comes from Romans 1:16 (iamnotashamed.org).
30. I was lucky enough to get almost three hours with David Menton, a half hour with Mark Looy, and an impromptu conversation with Georgia Purdom. Unfortunately, I was not able to speak to either Ken Ham or Jason Lisle. Ken Ham was out of town and Jason Lisle was too busy preparing for presentations and workshops in the upcoming weeks.
31. Patrick Marsh, the designer of Universal Studios attractions such as the *Jaws* and *King Kong* rides, was in charge of designing the Creation Museum's exhibits. He is also a committed Young Earth Creationist. From a purely aesthetic point of view, this was one of the coolest aspects of the museum.
32. Cover to cover, The King James Version is often cited as the most authentic translation amongst YEC. Henry Morris, the father of the YEC movement, has even released his own study Bible, *The Defender's Study Bible: King James Version*.
33. On the trip home, my friend and I had many disagreements about whether or not intelligent design could be rightly defined as a form of creationism. Though it shares a lot in common, we should be careful in making a distinction between biblically based YEC and intelligent design. Intelligent design does not align itself with any specific interpretation of text or religious affiliation. Though embraced by the Christian community, intelligent design finds its roots in the philosophy of religion, i.e. the teleological argument or argument from design.
34. Initiated by biologist Michael Zimmerman in 2004, The Clergy Letter Project is a correspondence between scientists and religious leaders, arguing for the compatibility between evolution and scripture. See www.theclergyletterproject.org.
35. "Kind" is of particular contention for YEC in regards to natural selection and evolution. As depicted in Genesis, God made all living things in accordance to their own kinds; a dog never turns into a non-dog. Yes, there are changes over time *within* a species but not between them. This is an attempt to make YEC compatible with Genesis. Of course, it is also a misunderstanding of natural selection.
36. In reference to Genesis 1:29–30, creationists hold that dinosaurs were vegetarian and, before the fall, not dangerous to humans.
37. The pamphlet *Is Natural Selection the Same Thing as Evolution?* by Dr. Georgia Purdom offers a hypothetical conversation between an evolutionist and a creationist that portrays the evolutionist as scientifically ignorant.
38. This phrase appeared on a bumper sticker with an amusing illustration of Ham picking up a Tyrannosaurus, holding it above his head, and walking briskly.
39. There is a famous paper by Schweitzer et. al titled "Intravascular Microstructures in Trabecular Bone Tissues of *Tyrannosaurus rex*," which AiG President Ken Ham and Carl Wieland have as evidence of a recent burial of a T-Rex, indicating a young earth. A thorough debunking of the claim can be found in Mark Issak's *The Counter-Creationism Handbook* or the website www.talkorigins.org.

40. Cultic Millieu Theory, coined by Colin Campbell, refers to the oppositional stance taken to mainstream knowledge by underground groups. The theory was further studied by scholars Jeffrey Kaplan and Heléne Lööw and is described as the “testing of hidden, forgotten and forbidden knowledge” (Kaplan and Lööw 2002).
41. As of 2006, 44 percent of Americans believed that God had made man in His image in the last 10,000 years. As of 2010 that number dropped to 40 percent (Gallup 2006, 2010).

Bibliography

- Appleby, Scott R. and Martin E. Marty, eds. *The Fundamentalism Project*. Vol. 2, *Fundamentalisms and Society: Reclaiming the Sciences, the Family, and Education*. Chicago: University of Chicago Press, 1994.
- Bergman, Jerry and Doug Sharp. *Persuaded by Evidence: True Stories of Faith, Science and the Power of a Creator*. Arkansas: New Leaf Publishing Group, 2008.
- Bible quotations and scripture passages from the King James Version, 1962.
- Borg, Marcus J. *Reading the Bible Again for the First Time: Taking the Bible Seriously but Not Literally*. New York: Harper Collins Publishers, 2001.
- Brettler, Marc Zvi. *How to Read The Bible*. Philadelphia: The Jewish Publication Society, 2005.
- Collins, Francis. *The Language of God*. New York: Free Press, 2006.
- Dawkins, Richard. *Unweaving the Rainbow: Science, Delusion and the Appetite for Wonder*. Boston: Houghton Mifflin, 1998.
- Dennett, Daniel C. *Darwin's Dangerous Idea: Evolution and the Meanings of Life*. New York: Simon & Schuster Paperbacks, 1995.
- Fasold, David. *The Ark of Noah*. New York: Wynwood Press, 1988.
- Gallup. “Evolution, Creationism, Intelligent Design 2006” and “Evolution, Creationism, Intelligent Design 2010.” Accessed June 20, 2011. <http://www.gallup.com/poll/21814/evolution-creationism-intelligent-design.aspx>.
- Gould, Stephen Jay. *Ever Since Darwin: Reflections in Natural History*. New York: Norton & Company, 1977.
- . *Hen's Teeth and Horse's Toes: Further Reflections in Natural History*. New York: Norton & Company, 1983.
- . *Leonardo's Mountain of Clams and the Diet of Worms: Essays on Natural History*. New York: Harmony Books, 1998.
- Ham, Ken. *The Lie: Evolution*. Colorado Springs: Master Books, 1987.
- Hastings, Ronnie J., Rick Neeley, and John Thomas. “A Critical Look at Creationist Credentials.” *Skeptic* 3, no. 4 (1989): 1, 5.
- Hecht, Jeff. “Why Doesn't America Believe in Evolution?” *New Scientist* 191, 2006. Accessed May 5, 2012. <http://www.newscientist.com/article/dn9786-why-doesnt-america-believe-in-evolution.html>.
- Isaak, Mark. *The Counter-Creationism Handbook*. 2nd ed. Los Angeles: University of California Press, 2007.

- Keck, Leander E. and Terrence E. Freetheim. *The New Interpreters Bible*. Vol. 1, *From Genesis to Leviticus*. Nashville: Abingdon Press, 1994.
- Klein, Richard. *The Human Career: Human Biological and Cultural Origins*. Chicago: University of Chicago Press, 1989.
- Lööw, Heléne and Jeffrey Kaplan, eds. *The Cultic Milieu: Oppositional Subcultures in an Age of Globalization*. Walnut Creek, CA: Altamira Press, 2002.
- Looy, Mark. Interview by Kevin Buskager, August 18, 2010. Answers in Genesis Creation Museum, Petersburg, KY.
- Menton, David. Interview by Kevin Buskager, August 17, 2010. Answers in Genesis Creation Museum, Petersburg, KY.
- Mooney, Chris. "The Science of Why We Don't Believe Science." *Mother Jones*, May/June 2011. Accessed May 5, 2012. <http://www.motherjones.com/politics/2011/03/denial-science-chris-mooney>.
- National Center For Science Education. "Kent Hovind Arrested on Federal Charges." NCSE.com. Accessed June 22, 2011. <http://ncse.com/news/2006/07/kent-hovind-arrested-federal-charges-00795>.
- Numbers, Ronald L. "George Fredrick Wright: From Christian Darwinist to Fundamentalist." *Isis* 79, no. 4 (1988): 624–45
- . *The Creationists: The Evolution of Scientific Creationism*. New York: A.A. Knopf, 1992.
- . *Galileo Goes to Jail: And Other Myths about Science and Religion*. Cambridge, MA: Harvard University Press, 2009.
- Pojman, Louis and Michael Rea. *Philosophy of Religion: An Anthology*. 5th ed. Belmont, CA: Thomson/Wadsworth, 2008.
- Purdom, Georgia. Interview by Kevin Buskager, August 17, 2010. Answers in Genesis Creation Museum, Petersburg, KY.
- . "Is Natural Selection the Same Thing as Evolution?" In *The New Answers Book I*, edited by Ken Ham, 271–82. Green Forest, AR: Master Books, 2006.
- Schweitzer, Mary Higby and John R. Horner. "Intravascular Microstructures in Trabecular Bone Tissues of *Tyrannosaurus rex*." *Annales de Paléontologie* 85, no. 3 (1999): 179–92.
- Sedley, David. *Creationism and Its Critics in Antiquity*. Berkeley: University of California Press, 2007.
- Whitcomb, John. C and Henry M. Morris. *The Genesis Flood: The Biblical Record and Its Scientific Implications*. Philadelphia: Presbyterian and Reformed Pub. Co., 1961.