Theistic Evolution: A Theological Critique

Dr. Ray Bohlin concludes a four-part series covering some of the big ideas in Dr. Stephen Meyer's book 'Theistic Evolution' by examining some of the theological problems with this perspective.

Did God Create a World with Pain and Suffering Already In It?

In this article I review the theological critique of theistic evolution from the book, *Theistic Evolution: A Scientific, Philosophical, and Theological Critique*. (I have previously written on the scientific problems here and here, and the philosophical problems here.) First, I review a chapter in the philosophical section, "Bringing Home the Bacon: The Interaction of Science and Scripture Today" by Colin R. Reeves. I'm focusing on Reeves's section on theistic evolution's problem with theodicy.

A theodicy seeks to explain God's reasons for allowing evil. He says that many conservative Christians who have embraced theistic evolution simply view natural evil as having always existed. He writes, "If natural evil is of necessity a part of evolutionary history, and if evolution is the process instituted by God to, in the end, result in creatures on earth with whom he could have a relationship, then it follows that God is the direct cause of natural evil – it is part of his plan."{1} Reeves quotes evolutionary philosopher David Hull: "The God implied by evolutionary theory . . . is careless, wasteful, indifferent, almost diabolical . . . not the sort of God to whom anyone would be inclined to pray."{2} Hull's solution is to simply reject any notion of God. He mentions

theologian Christopher Southgate struggling with this problem. How does one "redeem" the notion that pain, suffering, and death are intrinsic to evolution, which Southgate accepts? Southgate settles for an underwhelming notion of what he calls a "pelican heaven," symbolizing the hope that everything will be fine in the end. That is just bizarre. This seems to recognize the problem, but seeing no solution, this idea simply hopes that God has it figured out somehow.

Reeves refers to Denis Alexander, who simply recognizes that "God created a tough world . . . in which there is pain and death." For many theistic evolutionists, since humans evolved from a population of at least 10,000 individuals, there was no Adam and Eve and therefore, no Fall. He then references John Schneider who seems to say that we just shrug our shoulders and stop worrying!

If I were a theistic evolutionist, I would be very worried. But since they embrace evolution with no hesitation, they figure there just *must* be a way out of this dilemma, so don't make a big deal about it.

Did Adam and Eve Even Exist for Theistic Evolutionists?

Now I will focus on theologian Wayne Grudem's opening chapter in the theological section of the book. He briefly discusses twelve points at which theistic evolution (as currently promoted by its prominent supporters) differs from the biblical creation account if it is taken as historical narrative. Now I'll address the first three points:

1. Adam and Eve were not the first humans.
2. Adam and Eve were born of human parents.
3. God did not directly or specially create Adam out of the dust of the ground.

Something that needs to be understood concerning theistic evolution—or evolutionary creation as is now preferred—is that the human species came about as any other species, through naturalistic evolution. Calculations from some evolutionary creationists conclude that the human species can only be reduced to a population of around 10,000 individuals, certainly not just two. Some have even gone so far as to explicitly say that Adam and Eve did not exist. Others are willing to say that God chose a man and a woman from this population as Adam and Eve. But even this concession has problems of its own.

The primary question at this point is whether Genesis 1 to 3 is historical narrative. For evolutionary creationists, the simple answer is *no*. These initial chapters in Genesis are considered theological or allegorical but not a description of any actual events. But are they?

Grudem makes a significant case that these three chapters have always been understood as historical narrative and to consider them otherwise, one must bring an evolutionary viewpoint to the text. The text itself does not lead you to this conclusion.

Even if one assumes that God chose Adam and Eve out of the population of 10,000, they were born of human parents. God did not do anything supernatural to bring them into existence. This brings problems further down the line.

Were Adam and Eve Sinless?

Three more doctrines will be upturned if humans came about through a naturalistic evolutionary process. First, Eve wasn't formed from Adam's rib or side; second, Adam and Eve were not sinless; and third, if they weren't sinless, they didn't commit the first sin.

For evolutionary creationists, humans evolved and were not

specially created. Therefore, Eve was not formed from Adam's rib or side. But this raises some important questions. In Genesis 2, Adam gives names to all creatures (of course, theistic evolutionists say this didn't happen either). But he doesn't find a suitable helper. So, God creates Eve from Adam. Jesus refers to this passage in Matthew 19 where He addresses marriage. The context is that since Eve was taken from Adam, he is to hold fast to his wife. Paul also adds that man was not made from woman but woman from man (1 Corinthians 11:8). Elsewhere, he confirms that Adam was formed first, then Eve (1 Timothy 2:13). In both cases Paul indicates that Genesis 2 is historical narrative. It really happened this way.

Now we come to the issue of sin. If humans evolved and were not created, then all humans would have acted selfishly for the benefit of themselves and their offspring. This is a key feature of an evolutionary system. They likely cheated on their mates, stealing food or shelter. In other words, all humans were sinners from the beginning! However, at the end of day six (Genesis 1:31), God says that everything He made that day was not just good, but ***very*** good. This would preclude sin! According to theistic evolution, humans were not sinless, and Adam and Eve could not have committed the first sin. Indeed, God would have made a very difficult world, and humans were a part of that harsh reality. I think you can begin to see that theistic evolution plays fast and loose with significant doctrinal issue.

Were All Humans Descended From Adam and Eve?

To recap: In theologian Wayne Grudem's opening chapter in the theological section of the book *Theistic Evolution: A Scientific, Philosophical, and Theological Critique*, he briefly discusses twelve points at which theistic evolution (as currently promoted by its prominent supporters) differs

from the biblical creation account if it is taken as historical narrative.

I will now focus on points 7 to 9, which are rather distinct from each other.

7. Human death did not begin because of Adam's sin.
8. Not all human beings are descended from Adam and Eve.
9. God did not directly act in the natural world to create different kinds of plants and animals.

According to most if not all versions of theistic evolution, humans began as a population of at least 10,000 individuals. And since they evolved from an ape-like ancestor, death of humans had been around for hundreds of thousands of years. But when God informs Adam of the penalty of eating from the tree of the knowledge of good and evil, He says, "You will surely die" (Genesis 2:17). Not something you would say to someone who already knew he was going to die. In addition, Paul tells us in Romans 5 that sin came into the world through one man and with it, death! In 1 Corinthians 15, Paul links death through the one man, Adam, with life through the one man, Christ. Death entered for humans through Adam's sin.

The next problem we see is that theistic evolutionists contend that not all humans descended from Adam and Eve. This should appear rather obvious, since Adam and Eve were supposedly just two of thousands of humans at the time. Humanity would have descended from this population, not just Adam and Eve. But later in Genesis (3:20), we read, "The man called his wife's name Eve because she was the mother of all the living," meaning all humans.

Last, it should seem obvious that theistic evolutionists accept that all life evolved and just about all of Genesis 1 is not historical. But in all of Genesis 1, God repeatedly *acts*. He doesn't just let matter alone do the work.

Evolutionary creation dismisses not just the historical

accuracy of Genesis but also many New Testament doctrines.

Summing Up the Problems with Theistic Evolution

Finally, I'll review the last three of the twelve events in Wayne Grudem's chapter and summarize his critique. Essentially, the last three events are:

1. Did God rest from anything on the seventh day?
2. Was the original creation a safe place?
3. After Adam and Eve's sin, there was nothing new. Thorns and thistles already existed.

As I have stated throughout this article, according to evolutionary creationists, God did not act in any kind of a direct way to bring anything into existence except matter and the physical laws of how matter operates. This means there was nothing for God to rest from. But Exodus 20:11 states clearly that God made heaven and earth and all that is in them and then rested. This is the basis for resting and keeping holy the Sabbath. Why would man need a rest day if God didn't?

Genesis is clear that the earth and specifically, the Garden of Eden was a safe environment and all that changed with their sin. Things were now much more difficult. Adam and Eve would sweat to get their bread. Thorns and thistles would grow where apparently, they hadn't before. God had cursed the ground so it wouldn't yield its fruit as easily. But evolutionary creationists affirm that nothing could have changed since there never was an idyllic Garden. So there was no curse on the land.

Grudem concludes with eleven significant Christian doctrines that are undermined or denied by theistic evolution. Time prohibits mentioning all of them, but some of them are the truth of the Bible, evidence in nature for God's existence,

and God's wisdom. Grudem closes with this paragraph: "Because theistic evolution denies the historicity of these twelve events, it also denies or undermines eleven significant doctrines. In sum, belief in theistic evolution is incompatible with the truthfulness of the Bible and with several crucial doctrines of the Christian faith." Amen. We heartily agree.

Notes

The Biology of Human Uniqueness

Dr. Ray Bohlin demonstrates unique biological attributes that set humans apart because we are made in the image of God.

What's So Special About Humans?

As humans we tend to think of ourselves as rather unique in the created order of things. As Christians, we understand ourselves to be created in the image and likeness of God as we learn in Genesis 1:26. But what does this really mean? Certainly being made in God's image does not refer to our physical construction; God is spirit and therefore does not have a physical body. But God's plan from the beginning was to rescue us from our sin through the incarnation, God becoming man. Jesus was and is the Son of God, Messiah, the God-Man. Therefore it is not a stretch to suggest that our bodily make-up is meant to be the unique earthly home of Jesus and His Spirit within us. Therefore, I suggest that our biological make-up is unique in the animal kingdom since no other animal

is made in His image.

But what does this really mean? I am going to borrow from several sources, principally Michael Denton's *Nature's Destiny*{1}, to discuss the biological uniqueness of humans. The Discovery Institute is also in the process of producing a film series based on Denton's work, titled *Privileged Species: How the Cosmos is Designed for Human Life.*

We are able to point out numerous qualitative abilities in the human species found nowhere else in the animal kingdom. I will discuss these in detail below, but I'll provide a brief overview now to whet your appetite.

First, I'll be discussing our unique intelligence. Humans' ability to think abstract thoughts appears to be absolutely unique. It is difficult to arrive at a selective advantage in an evolutionary sense to this type of thinking, so where did it come from?

Second, and related to our intelligence, is our unique language capability. Most animals communicate with their own species, but no other species, including primates, actually use *language*. As toddlers we accumulate language by simply being around it. Chimps and gorillas have to go through painstaking trial and error and still can't communicate as a three-year-old does.

Third, our excellent vision allows us to use our intelligence, language and other capabilities to manipulate our surroundings in precise and advantageous ways.

Fourth, our excellent manipulative tool, the hand, is unsurpassed in other primates. We have both strength and fine motor control in our hands, allowing us to combine a strong grip and delicate finger movements that allow a wide range of movements. This, combined with our upright stance, provides an ability to restructure our immediate surroundings as no other

species can.

We are also a highly social species which allows for quick distribution of ideas to everyone’s benefit. And all these combine to allow us to be the only species to use and manipulate fire, which brings a host of unique abilities.

Human Intelligence and Language

As I mentioned above, our intelligence separates us from any other primate species. Our brain is three times the size of the brain of a chimp. But beyond that, the number of neurons and connections between neurons far surpasses any other mammal. Michael Denton cites that in each cubic millimeter of the human cortex, are 100,000 cells, about 4 kilometers of axonal wiring and 500 meters of dendrites, and around 1 billion synapse connections between neurons. We have 10 million more of these synapses than a rat brain.

The size and scope is one thing, but our mental capabilities are indeed unique. As mentioned above, humans are capable of abstract and conceptual thought. No other primate exhibits any signs of this capacity. In addition, our mathematical reasoning is completely *other* compared to other animals. You might suspect that some animals can count. But it is a learned response attached to reward. We don’t really suspect the rat/horse/chimp knows what they are doing. Comparing calculus to simply counting bananas is just no comparison at all.

When you stop to consider our appreciation of the arts, there is no place to go but humans. James Trefil is a physicist fascinated by biology and evolution. But when considering the arts he says, “No matter how hard I try, I can’t think of a single evolutionary pressure that would drive the ability of humans to produce and enjoy music and dance. . . . This has always seemed like a serious problem to me—perhaps even a more serious problem than that perceived by most of my colleagues.”

When we turn to language, our uniqueness is informed even further. Plants and animals all communicate in one form or another, but not by language as humans communicate. We communicate both new information and abstract concepts, something other species don't even approach. We possess the proper equipment to both produce and receive language and speech. And by proper equipment I mean both the brain processes and the anatomical necessities for actual speech (e.g., teeth, tongue, voice box, etc.). There is also a social ability that can utilize these upper levels of communication.

But we've heard about chimps and gorillas learning language. Kanzi, a bonobo chimpanzee, learned words and even symbolic use of a keyboard. Kanzi also learned through hearing the use of new words. But that is where it stopped.

To quote James Trefil again, "If we take the claims being advanced for Kanzi at face value, where are we? We have a member of the most intelligent primate species, a veritable Shakespeare of non-human animals, raised under special and unusual conditions, performing at the level of a human child of two and a half. But remember that in humans, real language begins just after this age. . . . Then we have to conclude that even in this optimal case, animals other than humans cannot learn real human language."

Human Vision and the Hand

Now I'd like to introduce two features we can easily take for granted, our hands and our eyes.

Ordinarily we don't think of our hands as being anything special. But just try to think of any other creature that can do the many and diverse things we can do with our hands. The closest match is the hand of a chimp. But
chimp hands are larger, stronger, and even clumsy. Simple things like using all ten fingers to type, peel an apple, or

tie a knot are beyond what chimps can do.

The strength in our fingers comes from larger muscles in the forearm and the fine manipulative control comes from much smaller muscles in the hand itself. Our ability to manipulate our environment with our hands is unparalleled. Using our intelligence we even devise additional tools for our hands to further extend our mastery of the world around us. Full use of our hands comes about from our upright and bipedal gait, allowing our hands the freedom not found in any other mammal.

In his book *Nature's Destiny* Michael Denton asks about the human hand "whether any other species possesses an organ approaching its capabilities. The answer simply must be that no other species possesses a manipulative organ remotely approaching the universal utility of the human hand. Even in the field of robotics, nothing has been built which even remotely equals the all-around manipulative capacity of the hand."

But in order to even use our hands well, we need exceptional vision to be able to detect all the little things our minds notice to manipulate. Given the physics of visible light and the dimensions and molecular process of detecting light in our eyes, the resolving power of the human eye is close to the optimum for a camera-type eye using biological cells and processes.

Some animals such as high-flying hawks and eagles detect motion from far greater distances that we can, and some organisms see much better in the dark than we do, but for all-around color vision, detail and resolution, our eyes seem to be the best there is. Combined with our highly interconnected brain, our upright gait for easily seeing straight ahead, a swiveling neck to see side to side, and our overall size, our eyes open the world to us as for no other species.

Developing science and technology, communicating to thousands

and even millions through the written word, and simply exploring the world around us, are only possible through an integrated use of our unique intelligence, social structure and speech, hands and vision.

The Use of Fire

As I have explored the biology of human uniqueness, I have focused on some of our individual capacities such as our intelligence, speech, our marvelous hands, and our unique all-around color vision. I have used throughout, the wonderful book by Michael Denton, *Nature's Destiny*. Now I'm looking at one of our key distinguishing characteristics which combine all of these. Humans are the only biological creatures that have mastered the use of fire. If you think for a minute, every other animal has nothing but fear when it comes to fire. We are also fearful of fire and the damage it can do, but we have also managed to harness it and use it.

There are a couple of obvious advantages for the use of fire. First it provides additional light after sundown that extends our activity into the evening. Second, fire provides additional warmth in the evening and allows us to venture into colder climates. Third, fire allows us to cook food, particularly meat which is a very significant source of fat calories and protein. Cooking our food certainly distinguishes us from any other creature and has allowed us to add the necessary energy to fully use that big brain of ours which is a major drain on our energy stores, even at night.

But beyond these, if we never harnessed the energy and power of fire, we would not have been able to develop tools involving metal. Using heat to forge ever more powerful hand tools and weapons revolutionized human culture. Without fire we could not have developed any form of chemistry and especially the use of electricity. Electricity has revolutionized human existence in the last 100 years. Fire is

an influential and powerful tool indeed.

But how have we been able to do this? First, we need to take advantage of our intelligent capability for abstract thought and reasoning. As I said earlier, we too fear fire, but we need to be able to think about it and be curious enough to not only rationalize that we might be able to harness its power, but that it would also be useful. This ability to deduce the control and use of fire requires high-level reasoning.

Denton also points out that for a fire to be sustainable it needs to be at least 50 centimeters across (or about a foot and a half). To create a fire of this size we need our upright stance to walk the distance to gather the right amount and size of branches. That means that our upright stance, free arms, the manipulative tools of our hands, and our discerning vision work together to allow us to create a sustainable fire.

Therefore, the control and manipulation of fire requires a combined use of most of our unique biological capacities. Think about this the next time you sit around a campfire or grill your supper on a warm summer day. It’s part of what makes us human!

Human Anatomy and Genome

In this article I have been focusing on aspects of human biology that make us unique in the universe of living organisms. I discussed in some detail our unique intelligence, allowing us complex and abstract thought. We have a unique ability to communicate audibly and through a symbolic written word. These combine with our stereo vision and unique manipulative tool the hand, to allow us sole possession of the ability to use and manipulate fire. All of these capabilities are made possible by several unique aspects of our anatomy.

Humans have the largest brain of any primate species. Whales, dolphins, and elephants have larger brains, but size is not

the main distinctive. Our human brain is structured like no other. If you were to open up just one cubic millimeter of our brain you would find over 100,000 cells with 4 kilometers of cell wiring and 1 billion connections between neurons. The structure and organization of our brain is definitely without parallel. Studies of our entire genome compared to chimpanzees indicate vast differences in non-coding sequences that influence the production of brain proteins. These changes are in the thousands.

In 1999, famous MIT linguist Noam Chomsky, reflected that "Thus, in the case of language, . . . (new research) is providing interesting grounds for taking seriously an idea that a few years ago would have seemed outlandish: that the language organ of the brain approaches a kind of optimal design, that it is in some interesting sense an optimal solution to the minimal design specifications the language organ must meet to be usable at all." Without our unique brain structure, our language ability would not be forthcoming.

When comparing our skeletal structure to those of our supposed closest ancestors according to an evolutionary explanation, there are major changes that would have been needed to be accomplished in a relatively short time. Casey Luskin from the Discovery Institute does an admirable job digging into these differences and makes some sweeping conclusions. Numerous studies indicate that between the lineage of *Australopithecus* and *Homo* there would need to be significant changes in shoulders, rib cage, spine, pelvis, hip, legs, arms, hands and feet. But of these major transitions, the fossil record is silent.

Luskin also refers to a study by Durrett and Schmidt in 2007 that estimates that a single-nucleotide mutation in a primate species would take 6 million years to become fixed. But what is needed are multiple mutations in multiple segments of the skeletal system and in the physiology of the brain. *Homo sapiens* are far more unique than many have suspected. The more

we learn, the more unique we become.

Since humans are created in the image of God, we expect human biological uniqueness. Even more significantly, bearing His image indicates an affinity for humans by the Creator we cannot fully comprehend.

Notes

1. Michael Denton, *Nature's Destiny: How the Laws of Biology Reveal Purpose in the Universe* (New York: The Free Press, 1998).

The Professor: Why Are You a Christian? – When Challenged, Can You Defend Your Faith in Christ

Are our adults ready to give a defense of the gospel? When challenged, can they give a reasonable explanation of their faith? Dr. Bohlin presents a sobering view of this question based upon years of experience questioning high school and college-age students on the basis for their belief in Christ. By exposing their lack of cogent answers to questions they may be asked, he challenges them to spend time exploring the questions and developing biblical worldview-based answers.

The Professor

Over the last ten years, I have used a very effective

technique to help teens realize their unpreparedness for the step toward college. It seems our young people are heading into public and even Christian colleges thinking they are ready for the challenge to their faith that higher learning can be.

Probe Ministries has sponsored a college prep conference since 1991 that was designed to help young people gain some insights and even some knowledge on how to address the intellectual challenges that college will provide.

If you remember the thousands of college radicals who protested and picketed in the ‘60s and ‘70s, they found their push for change was not very effective. Instead, many of them stayed in college, obtained Masters Degrees and PhDs. After all, it was easier than getting a real job! As a result, they are now your children’s professors!

The college campus was an anti-Christian breeding ground several decades ago and now it is even worse. Christianity is not so much openly mocked as it is marginalized and deemed a false and mischievous mythology.

If you haven’t already heard some of these statistics, you need to hold onto your hat.

In 2007, LifeWay surveyed 23- to 30-year-olds and found that seventy percent had taken at least a one year break from church during their college years.{1} Now, almost two-thirds of these return to some level of church attendance, but mainly to please family or friends who encouraged them to return. That means that most of our churched youth are making many of their life decisions, including marriage and career, apart from a church context. Even many who return carry numerous scars from bad choices during those years.{2}

With this statistical background, it’s plain our young people need some preparation before going on to college or the

military. But as most parents of teens know, just telling them they need this is less than likely to be convincing.

Enter the Professor. The technique I mentioned at the beginning is to impersonate an atheistic college professor doing research on the religious beliefs of young people. Sometimes the students know I am playing a role with them, but occasionally I play the professor and the students are none the wiser.

A Simple Question

When I step to the front of the room, I introduce myself as Professor Hymie Schwartz (a name borrowed from my late colleague Jerry Solomon who played this role far better than I do). I tell the group that, since I am conducting research on the religious beliefs of young people, their youth pastor, counselor, principal, teacher—whatever, has allowed me to visit with them.

I begin the conversation something like this: “Since this is a church or Christian school I presume you are all Christians. Is anyone not a Christian?” Of course no one raises their hand. But I am always aware that some may indeed not be believers and may not appreciate my questioning so I am always paying attention.

At this point I simply call on someone, usually someone who isn’t really paying attention or is engrossed in conversation with a neighbor. “You! Are you a Christian?” No one has ever answered no. Upon receiving an affirmative answer, with hands casually stuck in my pockets, I demand, “Why?”

Students are paying attention now. This is for real. Now consider my question for yourself. If Peter warns us to always be ready to give an answer to anyone who asks to give a defense for the hope that we have, this is a pretty basic question. In our highly secular culture, if someone finds out

you're a Christian, they may indeed ask you why. Peter says you ought to have an answer.

But this simple question why is usually something our young people, and even their parents, have never really considered. Their Christian faith is certainly something they would claim is central to their lives, but the dumbfounded looks on their faces tells me repeatedly that this question is a new one.

It's usually about this time that any parents sitting in the back are suddenly quite relieved I'm not talking to them!

By asking such questions, I can get them pretty riled up and confused. The point is not to have fun but to help them see that they need to be prepared and think a little about why Christianity is important to them and why they think it's true.

"I Asked Jesus into My Heart!"

Having their Christianity questioned usually comes as a surprise and even shock. Rather than directly answering the question, they try to tell me *how* they became a Christian. It usually takes the form of confidently saying they asked Jesus into their heart.

The professor quickly fires back, "You asked Jesus into your heart?! That sounds pretty gross, really. What's he doing in there with all that blood? Yuck!" That always gets a surprised reaction and a little befuddlement. The student typically tries to recover by saying something like, "No, I mean it's like I trusted Jesus as my Savior."

Again the professor will fire back quickly with a question like, "Why did you do that?" or "Savior? What did you need saving from?" I think you can see where this is going. It really is not difficult to pick something from what he or she said and challenge it. I either pretend I don't understand

what they said, forcing them to better explain themselves (which is rare), or I deliberately ask them why they think that way, or how they know that.

In answer to “How do you know that?” I am often told that “It says so in the Bible!” They usually can’t tell me where the Bible says that. I also ask if the Bible is true, and they say it is. But when I ask, “How do you know it’s true?” the blank stare reemerges.

Sometimes a student will say, “Because it’s the word of God!” Now I can really dig a little deeper. In response to further questioning, they usually can’t tell me where the Bible says it’s the Word of God nor can they tell me why the Bible is different from The Book of Mormon or the Qur’an. If there is a youth pastor or chaplain present there is usually an embarrassed look on their face or a head buried in their hands.

By this time the class is very tense and full of nervous laughter. When I reach a dead end with a student—for instance when they say, “I don’t know” with a very resigned and defeated voice—I look for one of the laughing students and ask, “What about you?” Of course that gets everybody’s attention again and off we go.

While I admit I have a little fun playing this role, it never ceases to break my heart at how ill-prepared our young people are to follow Peter’s advice to always be prepared with an answer. I have yet to find a student in ten years who is willing and able to go toe-to-toe with the professor.

“You’re a Narrow-Minded, Self-Righteous Bigot!”

Here are three other directions our conversations have frequently taken.

When I have challenged students to tell me why they think or believe Christianity is true, some will turn to their own subjective experience. Technically, there is nothing wrong with this, specifically when speaking to a Christian audience. But someone who doesn't even believe in God will frequently find ways to truly make fun of this element.

A student may describe that Jesus speaks to them in their prayer time, to which I quickly ask what His voice sounds like or how they know it was Jesus and not indigestion. The blank stares usually resume at this point. We have become so comfortable in our Christian bubble sometimes that we frequently don't see how unintelligible our language is to those outside the community of faith. It's tough to share the gospel that way.

Sometimes a student will interject that they believe in Jesus because that's what their family has taught them or it's what they learned in church. I usually pounce on that pretty quickly and repeat that this student believes Christianity is true because their parents told them so. The student usually agrees. After commending them for honoring their parents I tell them that's really pretty stupid. Pausing a second for the shock to register, I go on about the boy raised in India whose parents are Hindu and he respects his parents and believes Hinduism is true, so the boy in India and this student are both headed to heaven because they trusted their parents!

One time a student stammered around and eventually agreed with my statement as his youth pastor put his head in his hands.

Finally in talking about salvation I ask what happens to those who don't believe in Jesus. Most will hesitatingly say they go to hell. The professor predictably rants, "Just because I don't believe the same fairy tale as you, I'm going to hell?" When they predictably shake their head yes, I get down eye to eye and spit out, "You're a narrow minded, self-righteous

bigot!”

Always Be Ready to Give an Answer, with Gentleness and Respect

Students enjoy the interactive nature of this routine even though they are routinely embarrassed by their inability to handle the challenge. When Peter admonished all of us to always be ready to give an answer to everyone who asks us for a reason for the hope that we have, yet with gentleness and respect (1 Pet. 3:15), they fail miserably. Perhaps as a parent, you may be glad that I don’t do this with adult groups.

Often students will try to turn the conversation in their favor by asking the professor a question. I quickly dismiss that idea by simply answering that *I’m* asking the questions. But when we’re done, if time allows I attempt to leave them with hope by quickly summarizing how I, Dr. Ray Bohlin, Vice-President of Probe Ministries, would answer the same question.

Here’s the outline of my response. In a calm voice I quickly assert that I know there is a God. As a scientist I look principally at how marvelously our universe, galaxy, solar system, and planet are designed for complex life here on earth. The number of highly improbable coincidences rules out chance and strongly implies design. This is reinforced by the evidence from biology of the incredible complexity of life, particularly the coded information in DNA. This remarkable molecule with its accompanying system of transcription and translation screams for intelligence.

The fact that all people have some sense of right and wrong, even though we may disagree sometimes, tells us we are comparing our morality to some invisible standard outside ourselves that must come from a supreme Law Giver. I am convinced there is a supernatural God.

If this God exists, then has He spoken to man? I quickly tell about the uniqueness of Scripture, written by forty authors from eight countries over fifteen hundred years in three languages and all with a consistent and unique message of a God of love who ransomed us from our sins. Where we have archaeological evidence it consistently confirms the accuracy of biblical events. I am convinced the Bible is the true and unique Word of God.

The Bible throughout is about Jesus, who repeatedly claimed to be the unique divine Son of God and offered his death and resurrection on behalf of mankind as proof. That Jesus bodily rose from the dead is the only rational conclusion of the evidence of the empty tomb. On top of that, my personal experience of the last thirty-seven years has shown me again and again the unique love and power of God.

So what about you? Why are *you* a Christian?

Notes

1. "LifeWay Research Uncovers Reasons 18 to 22 Year Olds Drop Out of Church," 2007, www.lifeway.com/article/165949/, accessed May 15, 2010.
2. Youth Transition Network has researched this problem over the last ten years and has excellent resources, videos, research, and books and DVDs for purchase. Take a look at www.ytn.org.

The Common Woodpecker: Chance

or Design?

Dr. Ray Bohlin gave this presentation at the Discovery Institute's 2025 Dallas Conference on Science and Faith.

"Where Did Cain Get His Wife?"

Where DID Cain get his wife????????

That's a long-standing question that unfortunately, most commentaries don't offer much help answering. I assume a literal Adam and Eve as the first humans. Therefore for several generations the family tree has only one trunk. Seth and Cain could only have married daughters of Adam and Eve, their sisters.

That always causes some severe consternation. Francis Collins, an evangelical Christian and the former head of NIH, has written that that solution goes against numerous Old Testament laws. How could the God of the Bible allow for such things? Collins opts for an evolved human race and a figurative Adam and Eve. He also seems to think, though he doesn't explain, that Cain marrying his sister goes against the plain reading of the text.

The main societal taboo against incest is a practical one since offspring from these unions, even among distant cousins, carry an increased risk of birth defects. This is a well-known result of what geneticists call inbreeding. BUT Adam and Eve

were completely without genetic mutation, the source of inbreeding birth defects. Therefore there was no biological risk from sister/brother marriages.

In the time of Abraham, Isaac, and Jacob, it was still the practice of marrying within one's family, at least twenty generations after Adam and Eve if you assume no extra generations in the genealogies of Genesis 5 and 11.

In Genesis 20:12 Abraham tells Abimelech that he was not completely lying when he told Abimelech that Sarah was his sister; "Besides, she really is my sister, the daughter of my father though not of my mother." Sarah was Abraham's half-sister.

When Isaac needed a wife, Abraham tells his servant to go to his country and even his own family to find a suitable wife for Isaac (Genesis 24:4). Genesis 24:15 tells us that Rebekah was the daughter of Bethuel, who is the son of Nahor, Abraham's brother.

Isaac then tells Jacob to seek a wife from the daughters of Laban, Rebekah's brother. (Genesis 28:2). So Jacob married two of his first cousins, Leah and Rachel.

Before the Law of Moses, these kinds of unions were the norm. But over 400 years later, mutations have accumulated in all populations and such marriages are quite risky. Therefore, I think, that is why you read in Leviticus 20:17 that if you marry your sister who is either the daughter of your father or the daughter of your mother (thus including half-siblings) they shall be cut off. So a marriage like Abraham and Sarah's was specifically outlawed in the Law of Moses. I think times have changed and the offspring of these once-normal arrangements are at significant risk.

Also, there still may have been a reticence to marry a brother or sister with whom one grows up. But when you realize that Seth was born when Adam was 130 years old, certainly there

were many more children between Cain and Abel, and Seth. Therefore Cain very conceivably could have married a sister who was twenty or thirty years younger than he was, and therefore they did not grow up together, so there wasn't the same degree of familiarity as with a same-age sibling.

Bottom-line, I find no difficulty either theologically or biologically with Cain and Seth marrying their sisters. Marrying within the family remained the normal practice for over twenty generations.

Respectfully,

Dr. Ray Bohlin

Originally posted July 2001

The Star of Bethlehem from a Christian View

Dr. Ray Bohlin looks at the familiar story of the star of Bethlehem and provides several possible ways that God created this sign announcing the birth of the Christ. From a Christian worldview perspective, we know a bright light in the sky was able to lead the magi to the Christ child. Dr. Bohlin considers several ways God may have chosen to announce the coming of the Christ.

The Magi and the Star of Bethlehem

O, Star of wonder, star of night
Star of royal beauty bright
Westward leading, still proceeding,

Guide us to thy perfect light.

This familiar and haunting chorus from the Christmas carol, “We Three Kings of Orient Are,” introduces us to what seems to be the only ubiquitous biblical symbol during the Christmas season, the star of Bethlehem.

This Christmas, as you look over the Christmas cards in the stores or in your own burgeoning collection from family and friends, you will see one very constant element. Whether the scene depicts the nativity, a backyard nature scene, a Christmas tree, or just Santa making deliveries, if the nighttime sky is included, somewhere in the picture, eliciting warm and happy emotions, is a star. The star dominates the nighttime sky with its size and brightness and its long tail pointing to the earth. The star has almost become the signature which says, “This scene reflects a Christmas theme.”

At first, this may seem quite unusual for something which doesn’t even get mentioned in Luke 2, the more familiar account of our Lord’s birth. The star is featured only in Matthew’s brief description of the visit by the magi shortly after Jesus’ birth. I think the prevalence of the star stems from its mysteriousness. For example, what kind of star convinces a group of Gentile wise men to search for the new King of the Jews and actually leads them to Him? Before we explore this puzzle, let’s look at Matthew’s account beginning in Chapter 2 verse 1:

> Now after Jesus was born in Bethlehem of Judea in the days of Herod the king, behold, magi from the east arrived in Jerusalem, saying, “Where is He who has been born King of the Jews? For we saw His star in the east, and have come to worship Him” (Matt. 2:1-2, NASB).

A couple of things to note: first, these events take place after Jesus’ birth; second, this was in the days of Herod the

king; third, the magi arrived from an area east of Jerusalem (probably in the vicinity of Babylon or Persia); fourth, they already knew they were looking for the newborn King of the Jews, but the exact location eluded them; and fifth, it was viewing His star from their home in the east that led them on this journey.

After consulting with King Herod and finding out from chief priests and teachers that the Messiah was to be born in Bethlehem, the magi set out for the 5 mile trip south to Bethlehem. We pick up Matthew's narrative in verse 9:

> And having heard the king, they went their way; and lo, the star, which they had seen in the east, went on before them, until it came and stood over where the Child was. And when they saw the star, they rejoiced exceedingly with great joy. And they came into the house and saw the Child with Mary His mother; and they fell down and worshiped Him; and opening their treasures they presented to Him gifts of gold and frankincense and myrrh (Matt. 2:9-11, NASB).

Here we see that Matthew appears to describe the star as moving, as leading the magi to Jesus. There is clearly more than one magi, but only tradition holds that there were three—presumably because of the three gifts. These Gentile wise men worship the King whom the star has led them to. In the rest of this essay, we will explore the nature of this strange star and what it could have been.

What Was the Star of Bethlehem?

The Gospel of Matthew states that the star informed the magi of the birth of the King of the Jews and actually led them to Bethlehem once they had arrived in Jerusalem. The star of Bethlehem has been the subject of scholarly discussion ever since the first centuries after Jesus' birth. Some believed it was a supernova explosion, others a comet or a conjunction of

planets associated with specific constellations that would herald the birth of a king in Israel. Some have suggested that none of these astronomical events can adequately account for all that Matthew tells us within the context of his worldview. In this discussion, I will be investigating the more common explanations to see if we can come to some understanding as to just what the magi saw 2,000 years ago.

When Matthew quotes the magi as telling Herod that they observed the new King's star rising in the east, this can be interpreted as a new star, something never observed before. This has led some scholars to believe that the star of Bethlehem was a nova or supernova. A nova is a white dwarf star that literally explodes. The explosion may increase the brightness of the star a thousand to a million times its previous brightness, making a previously invisible star, visible. A nova, however, does not last very long. The initial blast of the explosion may only be observed for a few months before the star shrinks to a remnant of its previous brightness and disappears altogether.

There are numerous problems with this view. First, although there was a "new star" recorded by the Chinese in the constellation Capricorn in March-April of 5 B.C. that lasted only 70 days, there is nothing to connect this event with the birth of a King in Israel. Second, and perhaps most troublesome, nova do not move.

This leads to a discussion of a different astronomical event that may be associated with the "new star" (a comet) recorded by the Chinese in 5 B.C. The Chinese would not have distinguished a comet from a nova since all they recorded was something new in the sky that was temporary. A comet has the advantage of a tail that can appear to be pointing in a direction which may have guided the magi. In addition, a comet moves! A comet can even disappear as it moves behind the sun and reappear as it comes out from behind the sun. A major objection is that the Chinese make no mention of the "new

star” moving. Another problem is that comets are cyclical with a predictable periodicity. For instance, Halley’s comet appears every 76 years. If the star of Bethlehem were a comet, we would most likely have observed it again and been able to extrapolate back to the time of Christ to see if there is a match. Unfortunately, the only one to come close is Halley’s comet which appeared in 12 B.C., a date that is impossibly early.

One could always claim that the comet was one with a very long periodicity or one that has since disappeared from our solar system. This is certainly possible, but it does not really help the discussion. One might as well appeal to a purely supernatural occurrence that cannot be verified scientifically. There is no difference. And though comets were usually interpreted as heralding sweeping changes, the changes were usually for the worse and there is no way, once again, to connect these events to the birth of a king in Israel. Next, I will look at planetary conjunction, the most popular suggestion at planetarium shows during the Christmas season.

Did the Star of Bethlehem Result from a Triple Conjunction of Saturn and Jupiter?

The bright star usually seen hovering over Nativity scenes depicted on numerous Christmas cards actually dominates nearly every nighttime Christmas panorama. As I stated earlier, the Star of Bethlehem is just about the only ubiquitous biblical symbol associated with Christmas. The reason probably has to do with the mystery surrounding what this star was. Earlier, I showed the unreasonableness of the star being a comet or supernova explosion. If you were to attend a planetarium show concerning the star of Bethlehem, they would most likely present the idea that the star was a triple conjunction of the planets Jupiter and Saturn in the year 7 B.C. followed by a massing of Jupiter, Saturn, and Mars in 6 B.C. Realizing that

planetarium shows view Scripture as something less than historically accurate, it is still necessary to ask if this indeed could have been the Star of Bethlehem.

In the early 17th century the great astronomer and Christian, Johannes Kepler, calculated that a triple conjunction of Jupiter and Saturn had occurred in 7 B.C. While Kepler did not believe this to be the actual Star of Bethlehem, it may have alerted the magi to the coming star. 7-4 B.C. have become the usual dates for fixing the birth of Christ since Herod the Great's death, the Herod mentioned by both Matthew and Luke in their birth narratives, is well established in 4 B.C. Therefore, Jesus had to have been born in the few years prior to 4 B.C. since He started his three-year public ministry around the age of 30 (Luke 3:23) and His death is usually fixed between 27-30 A.D.

So just what is a triple conjunction, and why would it be significant to the birth of a King in Israel? A planetary conjunction is what happens when two planets come in close proximity to one another. A triple conjunction refers to when three separate conjunctions of the same two planets occur within a one year period. Triple conjunctions can be predicted, but they do not occur with regularity. There have been only 11 such triple conjunctions since 7 B.C. and the interval between them varies between 40 and 338 years.

The triple conjunction of Jupiter and Saturn in 7 B.C. was seen in the constellation Pisces in the months of May, September, and December. This provides sufficient time for the magi to see the first conjunction, begin their trip west to Judea, visit Herod by the second conjunction or at least soon afterwards, and perhaps not reach Bethlehem until the third conjunction when it is said to have appeared in the southern sky, and Bethlehem is just south of Jerusalem. Remember how the magi rejoiced to see the star again as they departed Jerusalem for Bethlehem. Ancient astrologers associated Jupiter with royalty or even a ruler of the universe. Saturn

was associated with Palestine or even with the deity who protected Israel. And Pisces was associated with the nation of Israel. Later a massing of Jupiter, Mars, and Saturn occurred again in Pisces in 6 B.C. It seems feasible then that this triple conjunction followed by the massing of the three planets in Pisces could indicate to the magi that a King of Israel and a Ruler of the Universe was about to be born in Israel.

While this seems to wrap things up rather nicely, there are significant problems. First, Jupiter and Saturn never were close enough to be confused as a single object. Matthew definitely describes a singular star. Perhaps more importantly, the use of astrology is necessary to interpret these astronomical signs properly. The Old Testament, particularly, mocks astrologers in Isaiah 47:13-15 and several times in Daniel (1:20, 2:27, 4:7, and 5:7). Jeremiah 10:1-2 seems to forbid astrology outright. The use of astrology is clearly outside the worldview of Matthew as he penned his gospel. It seems woefully inconsistent for the Lord to use astrology to herald the incarnation and birth of His Son into the world.

Was the Star of Bethlehem the Planet Jupiter?

In this discussion, I have considered a nova, a comet, and a triple conjunction of the planets Jupiter and Saturn as the Star of Bethlehem between 7 and 4 B.C., and none have seemed to be satisfactory. In 1991, Ernest Martin published a book titled, *The Star That Astonished the World*. His major thesis is that Herod died in 1 B.C. and not 4 B.C. If 4 B.C. is the wrong date for Herod’s death, then everything must be reevaluated.

While there are many lines of evidence that Martin uses to make his point, a critical issue is a lunar eclipse that

occurred just prior to Herod's death. According to the Jewish historian, Flavius Josephus, on the night of a lunar eclipse, Herod executed two rabbis. Herod himself died soon afterwards, just before Passover. Martin points out that the lunar eclipse of March 13, 4 B.C., was only a 40% partial eclipse and barely visible. Also he reconstructs the events between the eclipse and Herod's death, about 4 weeks, and determines there was not enough time for all these things to take place. However, Martin has located a total lunar eclipse on January 10, 1 B.C., twelve and a half weeks prior to Passover.

If we assume that Martin's date for the death of Herod is correct, then the years 3 and 2 B.C. can be added to the search parameters for the Star of Bethlehem. Martin points out that the planet Jupiter passes through a series of conjunctions over the course of these two years indicating that Jupiter is the star of Bethlehem.

Remember that Jupiter is considered the royal star. Well, in 3 B.C., Jupiter came into conjunction with Regulus, the star of kingship, the brightest star in the constellation of Leo, the first of several such conjunctions over the next year. Leo was the constellation of kings, and it was also closely associated by some with the Lion of Judah. This is beginning to look interesting. "The royal planet approached the royal star in the royal constellation representing Israel."(1) In addition, on September 11, 3 B.C., Jupiter was not only very close to Regulus, but the sun was in the constellation Virgo. Hmmm, the royal planet in conjunction with the royal star while the sun is in a virgin. September 11, 3 B.C., is also the beginning of the Jewish New Year. There seems to be an awful lot coming together here.

But what about the star appearing to stop over Bethlehem? Planets will actually appear to do just that as they reach the opposite point in the sky from the sun as they travel east across the sky. They will stop, reverse directions for a few weeks, stop again, and head east once again. It's called a

retrograde loop. Jupiter performed a retrograde loop in 2 B.C. and was stationary on December 25, during Hanukkah, the season of giving presents.

Just in case you are ready to proclaim the mystery of the Star of Bethlehem solved, remember that this whole scenario rests on Herod dying in 1 B.C. rather than in 4 B.C. The majority of historians and biblical historians can't accept this critical revision. If Herod indeed died in 4 B.C., all of these coincidences I just reviewed are just that, coincidences. Also, as I mentioned earlier, the use of astrological meanings is contrary to the worldview of Matthew. There is another option that has become very popular, and I'll discuss it next.

The Shekinah Glory as the Star of Bethlehem

So far in this essay, I have discussed several naturalistic explanations for the Star of Bethlehem: a nova or exploding star, a comet, a triple conjunction of the planets Jupiter and Saturn in 7 B.C., and the planet Jupiter as it traveled in the constellation Leo in 3-2 B.C. Each of these astronomical events represents a natural occurrence that God used to announce the birth of His Son. One of the major problems has been that in order to interpret any of these signs, one would have to use astrological meanings for these events and their locations in the night sky to reach the conclusion that a new King of the Jews has been born—something that is foreign to the biblical worldview. Perhaps there was a physical "star" that gave off real light but indeed was new but not reflected by any astronomical event.

Remember that Jesus' birth was the ultimate coming of the presence of God in the midst of His people. How was God's presence manifested elsewhere in the Bible? Moses saw a burning bush that was not consumed and God spoke to him from the bush. Again in Exodus, Moses was allowed to see God's

backside and afterwards his face shone with light so bright that the other Israelites could not look on his face. The Israelites were led through the desert by a cloud by day and a pillar of fire by night. When Jesus was transfigured He shone with a light as bright as the sun. When Jesus appeared to Saul on the road to Damascus, Saul was blinded by the light which the others with him saw as well. When God was imminently present, a bright light was associated with His presence.

The Shekinah Glory denotes the visible presence of God. This presence was real, and the physical manifestation was real. Remember that Saul was blinded by the light. The Lord often announces His presence by a very physical manifestation of bright light. What better way to announce the coming of Jesus, God's Son, the second Person of the Trinity than by a special light that is not some mere improbable astronomical event, rather an expression of the Shekinah glory, God's divine presence among men?

Astronomer Sherm Kanagy and theologian Ken Boa advance this thesis in their as yet unpublished manuscript, *Star of the Magi*. One of their strong emphases is the necessity to try to interpret the text of Matthew from first century Jewish perspective. They reject the idea that any astrological meaning could have been on Matthew's mind concerning this star. It is certainly fair to wonder, therefore, what this star was and how the magi interpreted it as a star signifying the birth of the King of the Jews. Kanagy and Boa reveal that Kepler concluded that the star was not some astronomical event and was a light that appeared in the lower atmosphere and therefore was not visible to everyone. But how did the magi interpret the star? This admittedly is the weakest part of the interpretation. The text gives no real hints. Magi were simply wise men of the east, not necessarily astrologers. They were Gentiles whose presence in the context of Matthew's Messianic gospel hints at the eventual spread of the gospel beyond the Jews. But how did they know what the star meant? We can only

assume there was selective revelation. Only Paul understood the voice from the light, though all who were with him saw the light. Only Moses was allowed up on Mt. Sinai to receive the Law. Only Peter, James, and John were present at the transfiguration, and they were told to keep it to themselves until Jesus rose from the dead. Manifestations of God's presence with men often were accompanied by selective revelation. Perhaps the meaning of the "star" was only revealed to the magi though others could actually see the "star."

Well, what was it, an astronomical event or the Shekinah Glory, manifesting God's presence among men? In my mind the mystery remains. Perhaps that is how God intends it to be.

Climate Change

Dr. Ray Bohlin looks at the science behind climate change alarmism and encourages you to be skeptical of what you hear from much of the media.

Are Human Beings Threatening All We Hold Dear through Climate Change?

The phrase "climate change" can mean very different things. It can be a rallying cry against the shameful practice of burning fossil fuels that will cause supposedly imminent worldwide disaster. The climate change bandwagon is a way to bring about global cooperation as we fight against the danger of too much carbon dioxide in our atmosphere. OR, the climate change agenda is a way for scientists who are becoming increasingly political to push for a more socialistic policy on generating

electricity. In this article I examine what's really going on with the science and make an argument for not believing anything you read or hear in the regular media.

There is no longer much of a middle ground. I have addressed global warming or climate change before, and I am becoming increasingly convinced that the entire enterprise of human-induced climate change is a monumental and brazen attempt to hoodwink the global public into thinking we have jeopardized our future, and drastic action is necessary.

Essentially, a group of climate scientists have used the power of the United Nations and their own reputations as scientists to proclaim that we must cut back severely on the use of fossil fuels, such as coal, oil, and gas. This will prevent the rising levels of carbon dioxide in our atmosphere from generating a runaway global warming that will lead to droughts, flooding, hurricanes, tornadoes, rising sea levels, etc., that will endanger our future on the earth.

This apocalyptic vision can seem quite threatening. Scientists are objective, right? They are not going to promote something the evidence doesn't support, are they? Well, scientists are human, and their worldview will affect their conclusions and I am convinced that some scientists are presenting a scenario of human-induced global warming that the scientific evidence simply does not support.

The supposed villain in this scenario is the gas carbon dioxide. You might not know that this natural and necessary gas is such a bad guy according to the doomsayers!

In this next section, I investigate the history of carbon dioxide in our atmosphere and the potentially negative and positive effects of increasing its concentration in the air we breathe.

What’s all the Fuss about Carbon Dioxide?

In this article I am discussing the possibility that humans, through the excess burning of fossil fuels, are jeopardizing the future of the entire planet. Previously this has been referred to as Anthropogenic (meaning human) Global Warming but is now referred to simply as Climate Change.

The evil villain in this scenario is carbon dioxide—what you get from burning coal, oil, and gas products. Carbon dioxide is known to be a greenhouse gas. No one disputes this. The relevant question remains, are humans putting too much carbon dioxide into the atmosphere, producing a warming that may not stop until the planet exceeds a livable temperature?

As I mentioned, carbon dioxide is a greenhouse gas. This means that when sunlight hits the earth’s surface, some of that energy is radiated back into the atmosphere and captured by carbon dioxide. The carbon dioxide then remits this radiation as heat, warming the atmosphere. This is a good thing. Water, CO_2, methane and a few other gases allow the earth to keep enough of the sun’s radiation and provide a cozy temperature for life around the earth.

But as we all know, there can be too much of a good thing. Many climate scientists are exclaiming that we have added too much CO_2 over the last 150 years too fast, and the resulting warming is jeopardizing the greenhouse balance.

The earth has warmed over the last 150 years by about 1 degree Celsius or 1.5 degrees Fahrenheit. But is carbon dioxide to blame? CO_2 levels rose from around 280 parts per million in 1900 to 400 parts per million today. There does seem to be a correspondence. However, we can obtain temperature data for the last 4,000 years from various sources deemed quite reliable in published
documents.

The data show that the peak temperature around 1500 BC was 2 degrees Celsius warmer than today. Around 200 BC temperatures were 1.5 degrees Celsius warmer than today, and around AD 1100, temperatures were a full degree Celsius warmer than today. Those warmings could not have been induced by the burning of fossils fuels.

Carbon Dioxide – Part 2

Certainly, carbon dioxide levels have been increasing due to the burning of fossil fuels over the last 150 years. And the average global temperature has risen by 1 degree Celsius or nearly 1.5 degrees Fahrenheit. But are the two linked in any way? Has the increase in atmospheric carbon dioxide caused the temperature increase?

First, carbon dioxide is a trace gas in our atmosphere. 78% of our atmosphere is nitrogen gas and 21% is oxygen gas. The remaining 1% is mostly argon gas and CO_2 comprising only 0.04%. So, when we are told that carbon dioxide has risen from 280 parts per million around 1900 to 400 parts per million today, that means the level of CO_2 has risen from about 3 parts per 10,000 to 4 parts per 10,000. That's not a lot of CO_2.

Second, carbon dioxide is plant food. Photosynthesis takes carbon dioxide from the air and water from the ground and uses the energy from sunlight to make the sugar glucose, the foundation of nearly all plant and animal life. The terrific book, *Inconvenient Facts: The Science That Al Gore Doesn't Want You to Know*{1}, tells us the increased CO_2 means more plant growth, more food production, and increased soil moisture since the plants don't need to keep their "pores" open as long and therefore lose less moisture through their leaves, leaving more moisture in the ground.

Third, if we use the age of the earth as estimated by the climate change community, we learn that our current level of

carbon dioxide is as low as it has ever been. I don't know how they arrive at these estimates, but published data say that carbon dioxide levels have been as high as 20 times what they are now, and temperatures were certainly not 20 times higher.

To sum up what I have reviewed above: carbon dioxide is necessary for plant growth, carbon dioxide is a trace gas and simply doesn't have the power to alter climate by itself, and carbon dioxide has been many times higher in the past.

In the next section I address the far-fetched predictions of climate catastrophe coming our way and look at what the data says.

Hurricanes, Tornadoes and Droughts, Oh My!

One of the tactics of the climate change community is to publish and threaten that increased global temperatures will result in more severe and more frequent extreme weather events. Droughts will become more frequent and severe, local flooding will become more frequent and severe. Catastrophic storms like tornadoes and hurricanes will become more frequent and severe. Basically, any form of severe weather will only get worse.

One source said that "the impacts of climate change are expected to increase the frequency, intensity, and duration of droughts."{2} So, let's look at a few. The EPA's own drought index shows far more severe droughts in the 1930s and 1950s than we have experienced in the last 60 years. Even globally, the frequency and severity of droughts has declined as global temperatures and CO_2 increase.

Another form of severe weather that is supposed to increase are tornadoes. In 2011, Paul Epstein said in *The Atlantic* that "The recent trend of severe and lethal tornadoes is part of a

global trend toward more storms."{3} Well, guess what? The actual trend of severe tornadoes at F3 or above is decreasing, and overall the number of tornadoes is decreasing. In fact, 2016 saw the fewest tornadoes in the United States ever recorded. So once again, the models and extremists are wrong.

Concerning hurricanes, you need to be careful. The U.S. National Climate Assessment of 2014 stated that the intensity, frequency, and duration of North Atlantic hurricanes . . . have all increased since the early 1980s."{4} That's true! But if you look at the long-term trend going back to 1920, instead of just the last few decades, the trend is downward. If you look at the frequency and severity of hurricanes for the whole earth, the trend is slightly downward. And the period between 2006 and 2017 saw no major hurricanes make landfall in the United States.

Whenever a severe weather event occurs in the United States, you can be sure the media will seize the opportunity to exclaim about how climate change is increasing storms overall. Just don't believe it.

Rising Sea Levels, Antarctic Ice and Polar Bears

In this article I've been talking about the threats of increasing extreme weather as a result of human-caused global warming or climate change. As I've tried to show, all these threats have no basis in the scientific evidence.

You have probably heard that because of the excessive warming, glaciers will melt, and sea levels are expected to rise and inundate low lying island chains and coastal communities. Simply put, NO. Sea levels have been rising for a few thousand years and the rate of increase went up way before humans began burning fossil fuels. Sea levels are rising about one inch per decade and the rate of rise is not changing.

So, what about glaciers, the Arctic ice and Antarctica? Well, Arctic ice has been receding over the last 30 years, but that will not cause sea levels to rise since that is floating ice. Some glaciers indeed have been receding, but they began doing so before humans began burning all that fossil fuel. But even as some of these glaciers recede, they are revealing remnants of forestation, proving that they had receded previously—with no help from humans. Lastly, some Antarctic ice is receding but overall, Antarctica is gaining ice, not losing it. And polar bears are doing just fine, increasing in numbers, not declining.

In closing, let me offer a few words of advice. First, disregard almost everything you read and hear in the regular media outlets. Most of these journalists or reporters have little scientific training and they are simply repeating what they have heard from extremist environmental groups whom they trust.

Second, ignore what you hear from most government officials, elected or appointed. They have bought the narrative for their own political gain and don't likely understand the science involved.

Last, let me suggest you research two organizations for more balanced information. First, the Cornwall Alliance, a group of evangelical Christian who are concerned about the environment and accurate information. Second is a group known as CFACT and their website Climate Depot. They repeatedly attend various climate change conferences around the world and consistently stump climate change extremists.

Bottom line: I encourage you to be skeptical concerning just about anything you encounter when it comes to climate change.

Notes

1. Gregory Wrightstone, *Inconvenient Facts: The Science That Al Gore Doesn't Want You to Know* 2017, Silver Crown

Productions, LLC.
2. Ibid, p. 65.
3. Ibid., p. 89.
4. Ibid., p. 93.

A Philosophical Critique of Theistic Evolution

Dr. Ray Bohlin provides an overview of some philosophical problems with theistic evolution, particularly methodological naturalism.

Methodological Naturalism as a Ground Rule of Science

In this article I review the philosophical critique of theistic evolution from the book *Theistic Evolution: A Scientific, Philosophical, and Theological Critique.*{1} I'm starting with the chapter in this section by Steve Meyer and Paul Nelson titled, "Should Theistic Evolution Depend on Methodological Naturalism?" Now I admit that's quite a mouthful. What is methodological naturalism?

Well, if you simply break the word down, you can see that it is first about a method, therefore "methodological." The second word is "naturalism." The philosophy of naturalism maintains that only nature exists. There is no supernatural, no spirit or spirits, only matter and energy.

Therefore, methodological naturalism is a method that only considers matter and energy. This refers for many to science.

So methodological naturalism is a method of science that only considers natural explanations. As Meyer and Nelson put it, "Methodological naturalism asserts that, to qualify as science, a theory must explain by strictly physical or material—that is, non-intelligent or non-purposive—causes."

Theistic evolutionists collectively assert that this is how science must be done. No purpose or intelligence allowed. Strangely though, Meyer and Nelson quote atheist Sean Carroll saying, "Science should be about determining truth, whatever truth that may be—natural, supernatural, or otherwise." In addition, they quote theistic evolutionist Darrell Falk admitting that natural selection and mutation do not explain the origin of animal form. Yet he also affirms there is a natural explanation waiting out there. Why?

Meyer and Nelson explain, "Because of his commitment to methodological naturalism, Darrell Falk will not consider any theory (such as intelligent design) that invokes 'creative intelligence.'" Instead, he waits for an adequate and fully naturalistic theory of evolution. But is this reasonable?

This is my third article critiquing Theistic Evolution. You can find the first two here and here. I simply ask that our brothers and sisters who accept Theistic Evolution, look again with unbiased eyes.

Why Methodological Naturalism?

Above, I said that science should be about determining truth, wherever the evidence leads. Methodological naturalism limits that search for truth in science to only natural explanations. So why this restriction?

Some theistic evolutionists like Nancy Murphy are quoted as saying that, "For better or worse, we have inherited a view of science as methodologically atheistic." This limit by history over the last 150 years hardly seems adequate. Others,

however, insist that methodological naturalism is supported by independent and objective criteria. These are often referred to as Demarcation criteria, such as:

1. Must be based on observable data and/or
2. Must be testable or falsifiable and/or
3. Must offer explanations based on natural law.

These criteria will be able to distinguish genuine science from pseudoscience, metaphysics, or religion.

I'm going to need to examine these criteria to see if they provide what is needed—basically a principled philosophical or methodological reason for supporting methodological naturalism. Can these criteria enable scientists or philosophers to do science in a normative way? Do the criteria justifiably exclude, *a priori*, some theories as unscientific or pseudoscientific, despite what the evidence may show? If so, then it may be perfectly justifiable to exclude from scientific consideration theories of the origin and development of life that invoke creative intelligence, and it may also be justifiable to require that theories refer only to materialistic causes or natural processes just as many theistic evolutionists assume.

BUT—and this is a big BUT—what if these demarcation criteria are neither independent nor objective? Is there already an inherent bias in these criteria and are they applicable in all situations? The answer is a resounding NO!

Demarcation Criteria Work, Except When They Don't

Earlier, I discussed if methodological naturalism is necessary for science, and most evolutionists and theistic evolutionists think that it is. There are what are called demarcation criteria that are supposed to distinguish science from

pseudoscience and religious theories.

There was a significant and famous federal court case challenging a new law passed in Arkansas back in 1980, that required creationism to be taught alongside evolution in public schools. Federal Judge William Overton struck down the Arkansas law and used many of these demarcation criteria as his reasoning. His reasoning was that creationism was not science based on these criteria.

First, he said, virtually verbatim from the brief submitted from the ACLU, creationism was not guided by natural law. Second, it was not explained by reference to natural law. Third, creationism was not testable against the empirical world. And fourth, Creationism was not falsifiable. On the surface judge Overton's decision was reasonable.

Therefore, despite whatever scientific evidence creationists were able to offer for their claims, it simply wasn't science. No matter what the evidence!

But within months of the ruling being issued, it was blistered by philosophers of science. They explained that many theories throughout science in the past and present would not qualify as science according to Overton's decision.

But as Meyer and Nelson point out, Newton and Galileo posed no natural law to govern gravitational phenomena. Yet, Newton's universal law of gravitation described and predicted gravity precisely, but according to the criteria, it's not science. Even Darwin's theory of natural selection knew nothing of the genetics it would eventually refer to. Were both Newton and Darwin unscientific? No one would claim that today. So, judge Overton greatly
overreached.

Demarcation Criteria Could Exclude Both ID and Evolution

In the previous section I began discussing what are called demarcation criteria that are supposed to distinguish between science and non-science. I showed that Newton's gravitational ideas were not based on scientific law. He had no idea what caused gravity. Another criterion is that science must be testable. But as philosopher of science Larry Laudan showed after the trial, creationists routinely offered geological tests for their catastrophic flood geology.

Another major criterion was that a scientific hypothesis must be observable. When discussing intelligent design, of course, the designer is not observable. So, ID is not science. Meyer and Nelson point out however, that this is applying the criterion far too rigidly. After all, we still cannot see gravitational waves, we have never observed an electron, we have never observed a mammalian carnivore evolving into a wolf or a lion, or anything even remotely this close in relationship.

But evolutionists can suggest evolutionary events that could give rise to the wolf and the lion, and we can very precisely predict and describe gravitational fields even though we can't observe gravity itself, only the results.

Appropriately, while we may not observe the designing mind behind the information rich content of living things, we are very acquainted with the results of intelligence. Our only model today for the origin of complex specified information (or language) is the mind. Our minds interpret and produce language every hour of our waking day; even in our sleep, we dream—again information.

So, if we use the criterion of observability too rigidly, then both evolution and ID are not science, but if we apply the criterion more realistically, then both materialistic and non-

materialistic theories can qualify as science.

Why Methodological Naturalism Sinks Theistic Evolution

I will now close my discussion of the philosophical objections to theistic evolution by discussing an intriguingly-titled chapter, How to Lose a Battleship: Why Methodological Naturalism Sinks Theistic Evolution.

Remember that Methodological Naturalism is defined by asserting that science, properly understood, can only suggest natural causes. Author Stephen Dilley reminds us of what has been known for decades; that Darwin's *Origin of Species* was written as a scientific answer to its main competitor, special creation. However, in the fourth edition, Darwin also claimed that special creation is not science.

But if you use scientific evidence to discredit a theory as false, it must be science, otherwise, scientific evidence is useless. But when Darwin also claimed that special creation was not science, then his scientific arguments against special creation should have been taken out of what he called "the long argument."

But even modern-day theistic evolutionists do much the same thing. On the one hand, they use methodological naturalism to contend that ID is not science, but then they offer scientific evidence that ID is false using scientific arguments. If ID is not science, then scientific evidence is useless; if it is science, then use scientific evidence to demonstrate that it is incorrect science.

Francis Collins is perhaps the most recognizable proponent of theistic evolution. In his book, *The Language of God*, he uses theological language to show evolution as being true and ID as false. Basically, he reasons that the design of the mammalian

eye is less than ideal. That is what you would expect, he says, from evolution, but not design. Evolution will cobble something together that works, whereas you would expect the Designer to design it perfectly. This argument has been around for some time and simply is not true, but you can see that Collins uses theological language to exclude design.

If evolution is science, then why resort to what we think God would do, to argue in favor of evolution? Either way, Dilley shows, theistic evolutionists would be wise to discard methodological naturalism. I agree.

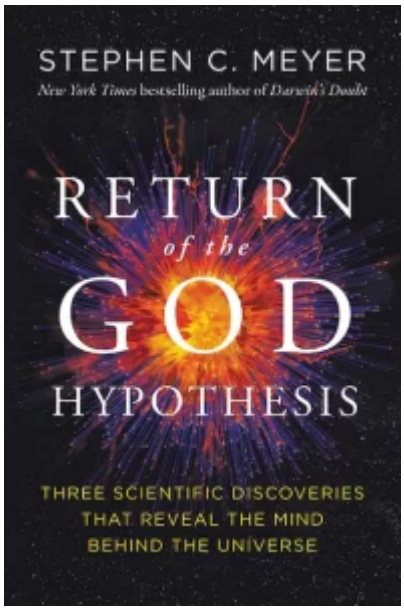
Notes

1. *Theistic Evolution: A Scientific, Philosophical, and Theological Critique* by J. P. Moreland, Stephen C. Meyer et al. (Wheaton, IL: Crossway, 2017).

‘Return of the God Hypothesis’ for Regular People

Dr. Ray Bohlin provides an overview of Stephen Meyer’s book Return of the God Hypothesis, *looking at how recent scientific discoveries provide evidence for an intelligent creator.*

Was There a God Hypothesis Prior to Scientific Materialism of Today?



In this article I give an overview of Stephen Meyer's ***Return of The God Hypothesis: Three Scientific Discoveries that Reveal the Mind Behind the Universe*** {1}. The three discoveries are first, the discovery in the 20th century of the Big Bang Model for the origin of the universe, second, the continuing discovery of the extreme fine-tuning of a universe that is friendly toward life, and third, the grand amount of genetic and cellular information needed for the origin of the first life and the Cambrian Explosion, where nearly all animal phyla suddenly appear with no ancestors.

But we need to cover a little history first. Meyer's title is "Return of the God Hypothesis." This implies that there was previously an accepted "God Hypothesis" in science. Then it was lost, and the time and evidence are right for that God Hypothesis to return. Early, Meyer quotes Richard Dawkins, "The universe we observe has precisely the properties we should expect if there is, at bottom, no design, no purpose, no evil, no good, nothing but blind pitiless indifference."{2} So according to Dawkins, science has shown God to be superfluous.

This has been the position of most scientists since the late 19th century, when two authors detailed a long-standing warfare between science and religion. Most of the scientific community followed along to the present day.

But Meyer goes on to document that most if not all historians of science today agree that the Christian worldview greatly influenced, some say was even necessary for, the rise of modern science. Three key Christian concepts were, first, God's ability to choose what kind of universe He wanted to

create. That meant that we can't just reason what nature *should* be like, we had to *discover* it. Second, nature is intelligible. Humans, being created in the image of God, could discover how nature operates (Romans 1:18-20). And last, human fallibility. Humans are sinful; therefore, one man's conclusions about the operation of nature must be subject to review of other scientists to ensure they are accurate. Christianity is the only worldview capable of developing modern science.{3}

So, what happened? Well, the Enlightenment happened where philosophers began to think only human reason is necessary or even proper to use in discovering the nature of humanity and nature around us. In the next section, I begin to investigate the three scientific discoveries that warrant a return of the God hypothesis.

Scientific Discovery #1: The Big Bang

The subtitle of Stephen Meyer's book, ***Return of the God Hypothesis is "Three Scientific Discoveries That Reveal the Mind Behind the Universe***." Now we will look at the first of these discoveries, the Big Bang.

First, I know that some of our readers don't accept the concept of the Big Bang since they are convinced that our universe is much younger than 13.7 billion years. I understand your position, [please read my article "Christian Views of Science and Earth History at probe.org/christian-views-of-science-and-earth-history/] but let's look at this then as an argument you can use with an atheist to show that his own dating of the universe and the Big Bang requires a Mind.

In the early 20th century, scientists like Edwin Hubble began to observe that the universe was not static as previously accepted, but was actually expanding. It took several lines of evidence, more powerful instruments, and many astronomers and

mathematicians to come to this conclusion. The novel result was thinking about running the clock backwards. If the universe is expanding now, if you go back in time the universe gets smaller and smaller. Eventually you get to a point where they say the universe was contained in a "particle" that was infinitely dense and occupied no space.

We know now the universe had a beginning. Astronomers and cosmologists had assumed the universe was static and existed for eternity. This conclusion was disturbing to some astronomers. Some rejected the Big Bang for philosophical reasons not scientific. Mathematician Sir Arthur Eddington said,

> "Philosophically, the notion of a beginning is repugnant to me. . .. I should like to find a genuine loophole."{4} "We [must] allow evolution an infinite time to get started."{5}

Edmund Whitaker wrote what many were thinking: "It is simpler to postulate creation ex nihilo—divine will constituting nature out of nothingness."{6}

And finally, Robert Jastrow wrote, "For the scientist who has lived by his faith in the power of reason, the story ends like a bad dream. He has scaled the mountains of ignorance; he is about to conquer the highest peak; as he pulls himself over the final rock, he is greeted by a band of theologians who have been sitting there for centuries."{7} So, God creating matter and energy out of nothing explains the Big Bang, where any naturalistic idea simply cannot explain the evidence.

Scientific Discovery #2: The Fine-tuning of the Universe for Life

Let us now turn our attention to the second of the discoveries in Stephen Meyer's book, the fine-tuning of the universe for life.

This has also been referred to as the “Goldilocks Universe,” meaning a lot of things turned out to be just right for the universe to be friendly to life. For instance, you may be aware that there are four
fundamental forces in the universe: gravity, electromagnetism, and the strong and weak nuclear forces. Each of these forces is expressed as an equation that contains a unique constant, and each one could have had a range of values at the Big Bang.

Meyer reveals that the gravitational constant alone is fine-tuned to $1/10^{35}$—that’s one chance in 100 billion trillion trillion. The other three constants are also fine-tuned, but even further, the constants are also fine-tuned in relation to each other. This adds another number of at least 1 part in 10^{50}.

Meyer had the opportunity to hear Sir John Polkinghorne at Cambridge during his doctoral work in the history and philosophy of science. Polkinghorne used an illustration of a universe generating machine with numerous dials and adjustable sliders, each representing one of the many cosmological fine-tuning parameters. Any slight change in the dials and adjusters of these parameters would render a universe hostile to life in any form. Polkinghorne would later say in an interview that a theistic designer provided a much better explanation than any materialistic hypothesis.{8}

Later, Meyer shows that including entities such as entropy and black holes, the odds of generating a life friendly universe are in this context 1 part in 10 to the power of 1 followed by 122 zeroes.{9} It would take several lines to write this number. This is an insanely impossible number to be arrived at by chance.

Nobel-Prize-winning physicist Charles Townes said, “Intelligent design as one sees it from a scientific point of view, seems to be quite real. This is a very special universe:

it's remarkable that it came out just this way."{10} This intelligence is perfectly consistent with the God of the Bible.

Scientific Discovery #3: Genetic Information for the First Cell

In this section I'm discussing the third scientific discovery; the need for complex specified genetic information for the first cell and new groups of organisms throughout time.

In Darwin's time, the first microscopes were being used and cells could be seen. Of course, scientists understood little of what they were seeing. Most of the cell appeared to be filled with something called protoplasm, a jelly-like substance that was thought to be easily derived from combining just a few substances. I've often said that if Darwin knew of the amazing complexity and the need for information storage, processing and regulation, evolution would have never been offered as a chance process.

Now we understand that the need for information to compose the first living, growing, and reproducing cell, is enormous. The first cell needed DNA to store information, specific proteins and RNA to produce additional proteins for the cell to function, and a controlled means to copy DNA accurately.

For instance, life uses 20 different amino acids to link together to form proteins, the workhorses of the cell. The number of combinations of two amino acids is 400. A four amino acid stretch has 160,000 different combinations. A small protein of "just" 150 amino acids has 10^{195} possible combinations. But how many of these could be a protein with some function? Just one in every 10^{77} sequences.

But also, new groups of organisms appear suddenly throughout the fossil record. Nearly all large groups of animals, or

phyla, appear in the Cambrian explosion. Animal and plant phyla rapidly diversified in at least 13 more explosions within phyla and classes into new classes, orders and families with no precursors, from flowering plants and winged insects to mammals and birds. All these explosions would require massive amounts of new genetic and developmental information.

The evidence supports the need for an intelligent designing mind to create all the needed information. Minds create information all the time. Natural processes simply can't do it.

Do These Three Evidences Point to Theism?

The three discoveries discussed in Stephen Meyer's book, ***Return of the God Hypothesis: Three Scientific Discoveries that Reveal the Mind Behind the Universe*** are the Big Bang, the extreme fine-tuning of the laws of physics to provide a life-friendly universe, and the necessary complex and specified information for the origin of life and the progression of complex life-forms through the fossil record.

But where does that leave us? Do these discoveries warrant a return of the God Hypothesis? Meyer examines four different worldviews to ask, would the universe we have, be expected by any of these worldviews? He uses a scientific approach called "the inference to the best explanation."

So, given a universe that is not only friendly toward life but contains living organisms, which worldview would best explain this universe? He begins with scientific materialism. Materialism has no explanation for the beginning of the universe. There was no matter or energy before the beginning, so matter and energy cannot account for the beginning of the universe. Moreover, for the origin of complex specified information needed for life, naturalism has no answer. In fact, only theism posits an entity, God, that has the causal

power to produce genetic information.

Let’s move to pantheism. Pantheism does not propose a personal God but an impersonal god. This “god” is one and the same with nature. Then pantheism suffers the same fate as naturalism in that the beginning can’t be explained by what doesn’t exist yet, matter and energy.

But what about theism and deism? To explain the notion of a beginning, an entity outside the universe is required. Both theism and deism propose a transcendent, intelligent agent, God. Both can explain the beginning and the fine-tuning. But what about the appearance of complex specified genetic information on the earth? Deism and many forms of theistic evolution require a front-loaded beginning: all the information for life was present at the beginning and natural laws took over from there—God did not intervene. But how was this information retained over billions of years until life arose on earth? And natural laws simply can’t produce complex specified information. Deism and theistic evolution won’t work. Only theism remains.

On pg. 298, Meyer states, “As one surveys several classes of evidence from the natural sciences—cosmology, astronomy, physics, biochemistry, molecular biology, and paleontology—the God Hypothesis emerges as an explanation with unique scope and power. Theism explains an ensemble of metaphysically significant events in the history of the universe and life more simply, more adequately, and more comprehensively than major competing metaphysical systems.”

Notes

1. Stephen Meyer, *Return of the God Hypothesis* (New York: HarperCollins, 2021).
2. Richard Dawkins, *River Out of Eden* 133, quoted in Meyer, *Return of the God Hypothesis*, 14.
3. *The Soul of Science: Christian Faith and Natural Philosophy*

(Wheaton, IL: Crossway Books, 1994) by Nancy Pearcey and Charles Thaxton.
4. Arthur Eddington, "The End of the World: From the Standpoint of Mathematical Physics" *Nature*, vol. 127 (1931) p. 450.
5. Arthur S. Eddington, "On the Instability of Einstein's Spherical World," Monthly Notices of the Royal Astronomical Society 90 (May 1930): 672. Quoted in Hugh Ross, *'A Matter of Days: Resolving a Creation Controversy*(Kindle Locations 484-485). RTB Press. Kindle Edition.
6. Cited in Robert Jastrow, 1978. *God and the Astronomers*. New York, W.W. Norton, p. 111-12.
7. Jastrow, *God and the Astronomers*. p. 113-114, 116.
8. *Return of the God Hypothesis*, p. 143-144.
9. Ibid., p. 150.
10. Bonnie Azab Powell, "'Explore as Much as We Can': Nobel Prize Winner Charles Townes on Evolution, Intelligent Design, and the Meaning of Life," *UC Berkeley NewsCenter*, June 17, 2005, www.berkeley.edu/news/media/releases/2005/06/17_townes.shtml. Cited in Meyer, *Return of the God Hypothesis,* p. 146.

Theistic Evolution – Part 2

Dr. Ray Bohlin reviews a second science critique of Theistic Evolution, asking if universal common descent is real. The evidence says no.

The Fossil Record and Universal Common

Ancestry

In a previous article, I examined the failure of neo-darwinism on the basis of the landmark book ***Theistic Evolution: A Scientific, Philosophical, and Theological Critique.***{1}

In this article, I'm reviewing the second science critique of theistic evolution. This section asks whether universal common descent or UCD is real. Universal common descent simply states that all organisms today are descended from one or a few early organisms by Darwinian evolution. UCD is usually if not always vigorously defended by theistic evolutionists, or, as they now prefer, "evolutionary creationists." UCD is considered beyond question. And doubters of UCD are compared to flat earthers and those who believe the sun and planets revolve around the earth. In this section I'll review the first chapter in this section by Gunter Bechly and Stephen C. Meyer.

Bechly and Meyer simply ask if the fossil record records this smooth transition from a single common ancestor to all life forms today. They survey numerous gaps in the fossils where certain large groups appear suddenly again, and again, and again. When a variety of new forms appear, the fossil record is full of gaps. In an old earth perspective, which theistic evolutionists adopt, one of these gaps goes back to the earliest life on earth. Fossils of bacteria show up 3.8 billion years ago right after the Late Heavy Bombardment of the earth by asteroids from 4.1 billion years ago to 3.8 billion years ago. This leaves virtually no time for the origin of that first life.

Let's jump ahead to the Cambrian Explosion where nearly all animal Phyla show up in the fossil record suddenly, with no ancestors, 450 million years ago. Arthropods, Mollusks, Annelids, Chordates, and many others just show up, already fully differentiated from each other, with few

clues of which phyla are most closely related to other phyla.

Then there is the Silurian-Devonian Radiation of Terrestrial Biotas. Here vascular land plants show up suddenly with no clue as to how and when they transitioned from marine plants to land plants.

Then there are the flowering plants. Charles Darwin called their sudden appearance in the Cretaceous period “an abominable mystery.”

There are more problems in the animal kingdom. All the orders of mammals with placentas suddenly show up in a narrow time window, too narrow to have evolved from earlier animals. A paleontologist said, “Within approximately 15 million years of dinosaur extinction most of the 20 orders of placentals had appeared.” And last, the orders of modern birds show up all at once in the fossil record around the same time. Whew, more tomorrow.

Universal Common Descent: A Comprehensive Critique (Part 1)

In this section I’m reviewing Casey Luskin’s chapter called “Universal Common Descent: A
Comprehensive Critique.”

In this chapter, Luskin covers four main topics:

- evidence against common descent from biogeography,
- the fossil record,
- molecular phylogenies, and
- embryology.

Since I covered the fossil record in the above section, I’ll focus on biogeography here and molecular phylogenies in the next.

Why would biogeography even be considered by theistic evolutionists as evidence of common ancestry? Well, it was used by Darwin, when he saw that the fossil mammals in South America resembled the animals living on the continent today. Luskin looks at a most glaring example of a severe problem in this category, Platyrrhine monkeys. Two families have prehensile tails, which
can grasp things like tree branches while their four limbs perform other tasks. While some old-world monkeys have tails, they are not prehensile.

The new world monkeys are said to have arrived in South America about 30 million years ago. At that time however, Africa and South America were at least 600 miles apart. So how did the platyrrhine monkeys, supposedly recently evolved from old-world monkeys, cross the ocean? The usual response is to suggest that a group or even a single pregnant female rafted on some fallen trees and brush.

This seems incredibly improbable. First, it would require these branches or shrubs to provide food for at least one pregnant female. This drifting pile of branches would take several weeks or most probably months to drift from Africa to South America. This incredible hypothesis is offered because these two groups of monkeys are supposedly related by common ancestry, but on different sides of the ocean. So, there must be a way to preserve common ancestry of these two groups of monkeys no matter how improbable.

Biogeography hurts UCD far more than it helps.

Universal Common Descent: A Comprehensive Critique – (Part 2)

In this section on Casey Luskin’s chapter on Universal Common Descent, my focus is on evidence from molecular phylogenies, where molecules like genes and proteins are compared to create

trees based on molecules, not anatomy. Scientists can now determine the amino acid sequence of proteins and the nucleotide sequence of the gene that codes for the protein.

Previously, Darwin's tree of life was constructed by comparing anatomical similarities and differences to determine where a species or group of species belonged in the tree. And since it was thought that genes determine the anatomical structure of an organism, a tree constructed by comparing the gene sequences of a protein should give the same tree as the anatomical tree. This was the expectation of numerous scholars.

However, there has been no agreement between anatomical and gene sequence trees except with very closely related species. Molecular phylogenies for different proteins reveal contradictory trees. Now, many scientists have abandoned Darwin's tree of life. In 1999, W. Ford Doolittle offered that "Molecular phylogenists will have failed to find the 'true tree' . . . because the history of life cannot properly be represented as a tree." The problem has only gotten worse. Several authors over the last 25 years are quoted by Luskin{2}: one said that "Different proteins generate different trees" (1998); another said, "Evolutionary trees from different genes often have conflicting branching patterns," (2009). A third author wrote, "The problem was that different genes told contradictory evolutionary stories" (2009). And finally, a fourth author said, "Evolutionary trees constructed by studying biological molecules often don't resemble those drawn up from morphology."

Many evolutionists have abandoned the tree model altogether, which leaves Universal Common Descent in grave trouble.

Missing Transitions: Human Origins and the Fossil Record

Theistic evolutionists agree that humans show clear evidence of having a common ancestor with chimpanzees. But if humans evolved from an ape-like ancestor, was there a real Adam and Eve? Was there an actual fall? Many evolutionary creationists would say no. They hold that humans evolved from a population of at least 1,000 individuals, not two, and that humans were already sinful and therefore never fell into sin.

Casey Luskin explores whether the fossil record documents a steady series of fossils transforming an ape-like ancestor into humans over the last 6-7 million years.

Luskin focuses on three critical questions about the hominin fossils: first, are there candidates for something very close to the common ancestor of humans and chimps; second, are the australopithecines intermediates between our ape-like ancestor and us; and last, is there a series of fossils linking australopithecines and humans?

Fragmentary fossils of three possible candidates for a common ancestor between chimps and humans have been found between 6.6 to 4.4 million years ago. But all three were eventually dismissed as simple apes or too fragmentary to draw any conclusions. All these fossils would easily fit inside a child’s shoe box.

The second question is, were the australopithecines intermediates between our ape-like ancestor and us? The australopithecines ranged from 4 to 1 million years ago and have long been advertised as on the road to humans. But paleoanthropologists cannot agree about the roles, if any, the australopithecines had in human origins.

The third question asks, is there a series of fossils linking australopithecines and humans?

Homo erectus, the first species in the genus *Homo*, appeared about 1.8 million years ago, but we haven't found *any* potential intermediates between australopithecines and *Homo*. "Although the transition from *Australopithecus* to *Homo* is usually thought of as a momentous transformation, the fossil record bearing on the origin and earliest evolution of *Homo* is virtually undocumented." The so-called evolution of the human species is fragmentary and blotchy.

Evidence for Human Uniqueness

Most evolutionary creationists believe that humans and chimpanzees share a common ancestor around 6-7 million years ago. Above, I addressed the lack of fossil evidence for the human descent from this common ancestor. But equally, evolutionary creationists claim there is powerful evidence linking humans and chimpanzees, that there is only a 1-2% difference of our DNA, indicating humans and chimps are closely related. Ann Gauger, Ola Hossjer, and Colin Reaves deal with this claim in their chapter, *Evidence for Human Uniqueness*.

This chapter uses an abundance of technical terminology. I will be avoiding many of those terms to save time needing to define them for you. I will be generalizing their discussion as much as possible.

If you simply compare the individual building blocks of DNA called nucleotides, where the sequences match up between human and chimp DNA, there is only a 1.23% difference between humans and chimps. But when you begin to include insertions, deletions, the number and location of repeated elements, as well as the extreme differences between the Y chromosomes of humans and chimps, the difference rises to at least 5%.

It's estimated that there are about 60 genes found in humans

that have no similar genes in chimps. It's difficult to get just one unique gene in 6 million years, but 60? Impossible!! There are differences in non-coding DNA, how chromosomes are arranged in the nucleus in cells of
different tissues, how genes are regulated, etc. Many of these differences are found in genes expressed in brain tissues.

These genetic differences bring about dozens of anatomical and physiological differences. Our brains are larger and constructed differently; our feet, necks, and location of the skull on the spine are different.

We think about past and future, we play, dance, make music, communicate through language, use symbolic logic, we write novels and poetry, use math and art, and show empathy for others. There are so many more differences. We do not share a common ancestor with chimps. There is not enough time for evolution bring about all these differences.

I hope that now you are convinced that evolutionary creationist insistence that Universal Common Descent be fully accepted is not based on evidence, just a belief that evolution is true.

Notes

1. J.P. Moreland, Stephen C. Meyer, Christopher Shaw, Ann K. Gauger, and Wayne Grudem, Editors. *Theistic Evolution: A Scientific, Philosophical, and Theological Critique.* Wheaton, IL: Crossway, 2017.

2. Pp. 380-382.