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.

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**Science and Human Origins**

*Dr. Ray Bohlin explains how the Discovery Institute’s book “Science and Human Origins” reveals why evolutionary theory cannot account for human origins.*

**Just What Needs to be Accomplished From Ape-like Ancestor to Humans?**

In 2012 the Discovery Institute published an edited volume discussing the possibilities of human evolution from an ape-like ancestor by Darwinian evolution mechanisms. In this article I will offer an overview of the book, *Science and Human Origins*{1} and investigate the state of research into human origins from an evolutionary perspective.

First I’d like to discuss the first chapter by Ann Gauger. Ann is a research scientist with Biologic Institute with laboratory experience at Harvard and the University of
Washington. Initially Ann points out two things that are necessary for there to be a link by common ancestry between humans and some ape-like ancestor. First there must be a step-wise adaptive path to follow. Neo-Darwinism depends on a slow, gradual path between two forms, genes or proteins. Rapid large jumps are likely to be too disruptive to the organism’s state of being. Either survival or reproduction will be compromised.

Second, standard unguided Darwinian mechanisms such as mutation, selection, random drift and genetic recombination have to be sufficient for the task. Modern evolutionary theory is quite insistent that only natural unguided processes are necessary for evolution to occur no matter what the transition being considered.

To better understand the problem, the book discusses the numerous types of biological changes needed to transition from a primarily arboreal monkey adjusted to life in the trees to a walking, running, hunting gathering, intelligent, talking human being. Compared to the other great apes, humans possess longer legs, shorter arms, different pelvis and rib cage, refined muscles for fingers, lips and jaw, eyes that can focus straight ahead and still see where we are walking, larger and unique brain structures, a head that sits directly on top of the spine and a spine that will support upright walking and running. Now add to that our unique capacities for language, art and abstract thought and you can easily understand that a lot needs to happen.

The usual series of fossils links together Lucy, the australopithecine closest to humans and Turkana Boy \((Homo erectus)\), the first full member of our genus Homo. Lucy is said to have lived 3.2 million years ago (mya) and Turkana Boy about 1.5 mya. This is indeed a very short time span in evolutionary terms, especially considering all that must change. One recent paper from the journal *Genetics* suggested that it would take about 6 million years for a single mutation to be fixed in a primate lineage. This transition probably needs tens of mutations. If you need two mutations, forget it. That would require 216 million years.

It’s not too hard to see that standard evolutionary processes are wholly insufficient to cause the transition between australopithecines and humans.

### The Earliest Fossils Leading to Humans

Now I want to discuss the evidence for human evolution from the fossils. Study into ancient humans is called paleoanthropology. Casey Luskin breaks down his discussion into two parts, Early Hominin Fossils and Later Hominins: The Australopithecines. Let’s start with the early hominins. As the story goes, humans and chimpanzees share a common ancestor about six million years ago. The fossil record of six million years ago has been pretty stingy. Not much to choose from for a human/chimp ancestor until the last twenty years.

The Toumai Skull \((Sahelanthropus tchadensis)\) was first reported in 2002 and is widely referred to as the oldest fossil in the hominin line. But when you dig a bit deeper as is always necessary when discussing human evolution, not everyone agrees. Some suggest that the Toumai Skull has far more in common with apes than anything resembling a human. All this skull really shows is how complex the evolutionary story has become.

A second fossil known as “Orrorin” \((Orrorin tugenensis)\) or “original man” in a local Kenyan language was designated as the earliest human link in 2001. But it was little more than a few bone fragments from an arm, thigh, lower jaw and a few teeth. As usual, there were some saying that Orrorin walked on two feet and others who said there isn’t enough information to determine how this organism moved. Another fossil found on the island of Sardinia is truly an ape but had some
indications that it too was bipedal. But Oreopithecus is thought to have arrived at its bipedal gait independently. This would clearly indicate that just because an ape-like fossil had bipedal adaptations doesn't mean it was ancestral to humans.

Last is the curious story of “Ardi” (*Ardipithecus ramidus*). Ardi is a 4.4 million year old fossil announced in 2009. Ardi quickly rose in fame and attention, being hailed by some as the oldest human ancestor found and the key to understanding how human bipedalism evolved. But Casey Luskin informs us that Ardi was originally found in the early 1990s. It took over a decade to piece the fossil together because it was found literally crushed and extremely brittle. How did they know how it all really fit together? Within a year other paleontologists indicated Ardi had little to do with human evolution and was simply overhyped. That's become a familiar story. So much change to cover and so little evidence.

**From “Lucy” to “Turkana Boy”**

We now turn to the appearance and nature of a very important fossil category. If humans have evolved by a Darwinian process from an ape-like ancestor, then there must be some species or group of species that show clear signs of being intermediate between fossil apes and humans. For many years that position has been occupied by the “australopithecines.” More specifically a particular species (*Australopithecus afarensis*) has been represented for decades as that ancestor, represented by a fossil known as “Lucy.”

As Casey Luskin carefully documents, Lucy is a fossil that represents about 40% of the original organism so it is very incomplete, although far more representative that any earlier fossils. He also notes that the original fossil was found scattered over a hillside and may not truly represent a single individual. But significantly, Lucy is not necessarily closely related or descended from the Toumai Skull, Orrorin, or Ardi that I discussed above. There is much about Lucy that is very ape-like, and many anthropologists even question whether Lucy can be considered as truly ancestral to humans.

Most significant about Lucy is the contention by some that she possessed a form of bipedalism that was very much or at least similar to human locomotion. But even that is highly contested by the evolutionary experts. Lucy’s skull is small and quite ape-like. The chest cavity is shaped in a way that would make upright walking difficult and her arms are long like apes and her legs are short like apes. Much is made about the shape of her pelvis. But as Luskin points out, the shape may have been an error in reconstruction since that part of the skeleton was found severely crushed.

Even more to the point, Lucy shows numerous characteristics that require significant reworking compared to the earliest human-like fossils (*Homo erectus*) usually represented by “Turkana Boy.” This two-million-year-old fossil shows itself to be entirely human. Even its small brain is within the range of modern humans and the brain architecture is also entirely human and nothing like Lucy. As Luskin points out there needs to be a sort of “Big Bang” between Lucy and Turkana Boy. (3)

What we have then is a large gap between apes and Lucy, and a large gap between Lucy and humans. So even though the fossil record could be interpreted to show a modest progression from apes to humans over time, there are no true transitional forms to document how this important transition took place.

**DNA Doesn’t Lie**

In a well-documented chapter, Casey Luskin examines the claims of evangelical scientist, Francis
Collins, that there is explicit and undeniable genetic evidence that humans and chimps evolved from a common ancestor. Collins has earned a stellar reputation as a medical geneticist for first discovering the gene responsible for cystic fibrosis, leading the Human Genome Project for over a decade, and then in 2009 being named by President Obama as the head of the prestigious National Institutes of Health (NIH). In between Collins’s role as head of the Human Genome Project and his current role at NIH, he founded an organization, BioLogos, dedicated to convincing the church in America that evolution is indeed is a fact and we need to adjust both our science and preaching to reflect that fact.

In preparation for BioLogos he published a book titled *The Language of God.* In this book, Collins presents a two-fold line of evidence that humans and chimps evolved from a common ancestor. First he appeals to what are known as repetitive elements in our DNA. All mammalian genomes have relatively short sequences that can be very specific to species and groups of species, spread throughout the genome. It appears as if these sequences make copies of themselves and randomly insert the copy elsewhere in the genome. These repetitive elements are frequently found in the same place in the genome in distant species such as mice and humans. These are referred to as Ancient Repetitive Elements (ARE). These AREs are assumed to have no functional significance in the organism. This renders them as what is referred to as “selfish DNA” which exists only to survive and reproduce.

Some AREs are found in the same chromosomal location in mice and humans as well as humans and chimps. This sure seems like evidence of common ancestry, as Collins claims. But the assumption I just mentioned, that these sequences have no function, has been widely disproved in just the last ten years. As a result of the Human Genome Project that Collins led, we can now search all DNA sequences for some kind of function. Relying on work published by Richard Sternberg, Luskin lists twenty newly discovered functions for different types of repetitive elements in mammalian and human genomes.

The chapter discusses two other now disproven evidences for common ancestry of humans and chimps. I hope you can see that new and mounting evidence is making the common ancestry of humans and chimps even more difficult to defend.

**How Many Humans at the Start?**

In the final chapter of *Science and Human Origins,* Ann Gauger discusses a bit more of an academic argument for humans having evolved from an ape-like ancestor. Some evolutionary geneticists have described an argument that the level of genetic variation for particular human genes could not have arisen from a beginning of just two people. They state that standard genetic equations indicate that the human population most likely descends from a population of around 100,000 individuals. Just two people could not have generated this much variation in 100,000 years, let alone less than 10,000 years. If their analysis is true, then the Biblical account of Adam and Eve becomes a theological story with no historical significance. So let’s take a look.

Gauger investigates in detail the most variable gene in humans. This gene codes for a protein involved in the immune system. One section of this gene is what geneticists call “hypervariable.” Evolutionist Francisco Ayala and others researched this gene in the mid-1990s. Ayala’s conclusion was that the original human population that separated from the line that evolved into chimps contained at least 32 copies of the gene in its population. Each of us has only two copies of each gene, so 32 copies requires at least 16 people. But since, over time, different gene copies are lost, Ayala estimated a human population of at least 10,000 individuals with an average closer to 100,000.
Gauger points out that Ayala misused several assumptions. He assumed a small mutation rate and he assumed no selection. When Gauger corrects for these errors and examines the studies of others, she determines that the equations, when the proper assumptions and mutation rates are used, the original human population could have had as few as 4 copies of this gene. Let’s see, two copies per person, four copies, only needs two people. How about that!

Obviously in this short article I have intentionally glossed over the technical details. Ann Gauger gives you the details as well as more non-technical summaries along the way. I strongly encourage you to purchase the book. At 122 pages, it’s readable in a Saturday. Considering all I have covered this week, my doubts about human evolution have only been strengthened. It becomes even more obvious over time that Darwinian evolutionary mechanisms are proving less and less adequate.

Notes

2. Ibid., p. 51.
3. Ibid., p. 65-70.

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**Darwinism: A Teetering House of Cards**

*Steve Cable examines four areas of recent scientific discovery that undermine evolution.*

**The Origin of Life: A Mystery**

Confidence in Darwinism erodes as new discoveries fail to produce supporting evidence. Three books released in 2017,

• *House of Cards* by journalist Tom Bethel
• *Zombie Science* by biologist Jonathan Wells
• *Undeniable* by biologist Douglas Axe

address areas where Darwin’s grand idea is weaker now than 150 years ago. As Bethel states, “Today, it more closely resembles a house of cards, built out of flimsy icons rather than hard evidence, and liable to blow away in the slightest breeze.” {1} It is not just critics who recognize this weakening. In 2016, the Royal Society in London convened a meeting to discuss “calls for revision of the standard theory of evolution.” {2}
Four areas where Darwin hoped future work would support his theory will be examined. The first area is the origin of reproducing beings.

Darwin only hoped that life may have originated in a “warm little pond.” But as one scientist states, “The origin-of-life field is a failure—we still do not have even a plausible coherent model, let alone a validated scenario, for the emergence of life on earth.”

Darwin assumed the first reproducing cells were very simple. In truth, the simplest cells are composed of impressively complex machines which could not have arisen directly from inorganic components. But there are no known simpler life forms. As Michael Behe commented, “The cell’s known complexity has increased immeasurably in recent years, and points ever more insistently to an intelligent designer as its cause.”

The probability of even one of the amino acids necessary for life appearing by random mutations is effectively zero even given billions of years. As Doug Axe writes, “(Examining how) accidental evolutionary processes are supposed to have invented enzymes without insight, we consistently find these proposals to be implausible.”

Another professor states, “Those who think scientists understand the issues of prebiotic chemistry are wholly misinformed. Nobody understands them. . . . The basis upon which we . . . are relying is so shaky we must openly state the situation for what it is: a mystery.”

Facing insurmountable odds against life appearing, some materialists propose an infinite number of parallel universes. With infinite chances, even the most unlikely events could occur. But, as Axe points out, “The biological inventions that surround us (are) fantastically improbable, with evolution explaining none and the multiverse hypothesis explaining only those absolutely necessary for wondering to be possible, . . . this hypothesis fails to explain what we see.”

Even after resorting to unobservable fantasy situations, the challenges presented by the origins of life cannot be overcome. A Darwinian model begins with a self-replicating life form. Currently, this appears to be a hill that no one knows how to climb.

**An Example of Macro-evolution: Still Searching**

Darwin’s theory is dependent upon the unobserved concept of macro-evolution, i.e. intergenerational differences accumulating into different species over time. Darwin believed his magic wand of natural selection could direct this process toward increasingly complex beings. Has further research confirmed his belief?

Let’s begin with fossil evidence.

The number of fossils studied has blossomed over the last 150 years. All the types of species which exist today appear in the fossil record over a relatively short period of time. And, in most cases, with no transitional forms between them undermining Darwin’s theory. As science historian Stephen Meyer concludes, “As more . . . fossils are discovered (failing) to document the great array of intermediate forms, it grows ever more improbable that their absence is an artifact of either incomplete sampling or preservation.”

And evolution proponent Stephen Gould wrote, “The extreme rarity of transitional forms in the fossil record persists as the trade secret of paleontology. The evolutionary trees . . . have data only at the tips and nodes of their branches; the rest is inference.” Nature editor Henry Gee put it this
To take a line of fossils and claim that they represent a lineage is not a scientific hypothesis that can be tested, but an assertion that carries the same validity as a bedtime story.”{12}

Cleary, the fossil record challenges rather than supports conventional evolutionary theory.

Let’s continue by looking at experimental evidence.

Perhaps someone has recreated macro-evolution in the lab. Studies of fast replicating populations have shown no ability to accumulate multiple changes. Attempts to create macro-evolution in fruit flies, bacteria and viruses concluded “Neither in nature nor under experimental conditions have any substantial effects ever been obtained through the systematic accumulation of micro-mutations.”{13}

Bethel points out, “The scientific evidence for evolution is not only weaker than is generally supposed, but as new discoveries have been made . . . , the reasons for accepting the theory have diminished rather than increased.”{14}

Yet biology departments still spout their unfounded belief in the “magic wand” ability to produce an unimaginable array of advanced creatures in what “amounts to the triumph of ideology over science.” Even some materialists see through this charade. One geneticist at Harvard wrote, “If scientists are going to use logically unbeatable theories about the world, they might as well give up natural science and take up religion.”{15}

“Darwin might well have been dismayed (at) the meager evidence for natural selection, assembled over many years. . . . It is worth bearing in mind how feeble this evidence is any time someone tells you that Darwinism is a fact.”{16}

**The Challenge of Irreducible Complexity**

Darwin wrote his theory would “absolutely break down” if an organ could not be formed by “numerous, successive, slight modifications.”{17} Have such organs been found? Irreducible complexity and functional coherence say yes.

Irreducible complexity means that some known functions require multiple parts that have no purpose without the other parts. For a Darwinian process to create these functions would require useless mutations to be indefinitely maintained until combined with other useless mutations. Michael Behe’s analysis has shown the 4 billion years of the earth’s existence are not sufficient for such complex functions to be created by random mutations.

Even if an improbable series of events occurred allowing one of these complex forms to arise through a set of random mutations, it would need to happen thousands, if not millions, of times to produce our complex life forms.

In *Undeniable*, Axe introduces “functional coherence,” defined as “The hierarchical arrangement of parts needed for anything to produce a high-level function—each part contributing in a coordinated way to the whole.” Axe examines the role of functional coherence as a microscopic level and concludes, “The fact that mastery . . . of protein design is completely beyond the reach of blind evolution is . . . evolution’s undoing. . . . The evolutionary story is . . . something much less plausible than hitting an atomic dot on a universe-size sphere over and over in succession by blindly dropping subatomic pins.”{18}

In *Zombie Science*, Jonathan Wells considers the number of irreducibly complex subsystems required to evolve fully aquatic whales. These features include flukes with specialized muscles,
blowholes with elastic tissues and specialized muscles, internal testicles with a countercurrent heat
exchange system, specialized features for nursing, and many others. For Darwinism, these changes
are insurmountably large. Whales certainly appear to be the product of design, not unguided
evolution.

He also points to advanced optical systems. The process by which light detection becomes an
intelligent signal to the brain is irreducibly complex. Two scientists wrote, “the prototypical eye. . .
cannot be explained by selection, because selection can drive evolution only when the eye can
function at least to a small extent.”{19} These scientists determined the eye was irreducibly
complex and could not be developed by natural selection.

Richard Lewontin, a committed materialist, does not believe natural selection can explain complex
life forms. He cannot conceive of any gradual set of useful incremental changes resulting in a flying
being. Unless a small change gives an advantage, “the change won’t be selected for, and obviously, a
little bit of wing doesn’t do any good.”{20}

So we can agree with Darwin on this issue: his theory “absolutely breaks down.”

**DNA and Molecular Science Muddy the Scenario**

Has uncovering the role of DNA filled the gaping holes in Darwinism or created more?

A species’s DNA sequence, we are told, contains all the information needed to create new members.
But Douglas Axe states, “(We) would be shocked to know the . . . state of ignorance with respect to
DNA. The view that most aspects of living things can be attributed neatly to specific genes has been
known . . . to be FALSE for a long time.”{21}

The higher-level components making up a species are not entirely specified by its DNA. As Wells
explains, “After DNA sequences are transcribed into RNAs, many RNAs are modified so they do not
match the original transcript. . . . (changing) over time according to the needs of the organism.” The
claim that “DNA makes RNA makes protein” is false.”{22}

Creating new complex functions requires multiple changes in the DNA sequence AND in other
elements making the chance of random mutations creating new species untenable.

The original conflicting “trees of life” were created examining the morphology, i.e. the structures of
species. These trees suggest different major nodes but almost no transitional forms. Can DNA
analysis help? Research has shown that groupings based on morphology are not supported by DNA
analysis. As Wells notes, these conflicts “are a major headache for evolutionary biologists.”{23}

This disconnect from recent gene research is not limited to a few cases. As reported in 2012,
“incongruence between (trees) derived from morphology . . . , and . . . trees based on different
subsets of molecular sequences has become

pervasive.”{24}

But DNA analysis alone has a great degree of uncertainty. In one study looking at fifty genes from
seventeen animal groups, multiple conflicting ideas on the evolutionary relationship between the
animal groups were proposed.{25} All had seemingly absolute support from the DNA evidence, but
all could not be true.

Originally scientists thought DNA was primarily junk sequences not contributing to the
characteristics of a species. This junk represented functions which were replaced or had no current
usefulness. As Francis Crick, one of the discoverers of DNA’s structure, said, “The possible existence
of such selfish DNA is exactly what might be expected from the theory of natural selection."{26}

But recent research shows at least eighty percent of the human genome contributes. As Wells reports, "The evidence demonstrates that most of our DNA is transcribed into RNA and that many of those RNAs have biological functions. The idea that most of our DNA is junk, . . . is dead."{27}

The facts uncovered about the functioning of DNA and other elements in passing on characteristics to the next generation appear to make more holes in evolutionary theory.

**A Philosophy Props Up Its Poster Child**

Recent, scientific insights have weakened Darwin’s theory. Yet many are unwilling to discuss its weakness. Why this reluctance? It falls into two camps: 1) a commitment to materialism and 2) a desire for academic acceptance. Materialism is a religious viewpoint where everything has a natural explanation. A spiritual component or events resulting from an outside force are rejected. Science is not materialism. Science attempts to identify and quantify the forces that make the universe. A materialist scientist adds a religious restriction: only natural forces can be considered.

Bethel states, “Although Darwinism has been promoted as science, its unstated role has been to prop up the philosophy of materialism and atheism.”

Wells suggests, “Priority is given to proposing and defending materialistic explanations rather than following the evidence wherever it leads. This is materialistic philosophy masquerading as empirical science, . . . zombie science.”{28}

Atheist Colin Patterson offers an honest view regarding the theory of evolution as “often unnecessary” in biology. Nevertheless, it was (taught as) “the unified field theory of biology,” holding the whole subject together. Once something has that status it becomes like religion.”{29}

Until they have a better theory, they will stand behind it rather than consider alternatives. They fear any uncertainty will lead to questioning other aspects of materialism, such as that free will and love for others are simply a façade promoted by natural selection.

Bethel points out, “If our minds are . . . accidental products of a blind process, what reason do we have for accepting materialist claims as true?“{30} After all, our minds are selected to improve our survivability, not to discern what is true.

Many scientists are not die-hard materialists. They believe there may be a spiritual aspect of our existence. Yet they promote the materialistic view. For most, this inconsistent approach is a reaction to the threat of censure from the establishment.

Axe claims, “The religious agenda is the enemy that threatens science. . . . Everything that opposes the institutionalized agenda is labeled ‘anti-science.’”{31}

The same arguments used against intelligent design apply more accurately to Darwinism. Bethel states, “(Some) have said that design can’t be measured and therefore it is a religious belief. . . . They might also have said the macro-evolution has not yet been measured, or so much as observed.”{32}

In this review, we have seen

1. No materialistic concept for life’s origin
2. Little evidence for transitional life forms
3. Strong evidence complex functions could not arise through random changes
4. DNA playing havoc with the basic tenets of Darwinism.

Now we wait for the façade raised by supporters of a flawed concept to collapse.

Notes

22. Wells, page 90.
23. Wells, page .
27. Wells, page 128.
29. Bethel, page 149.
Is Theistic Evolution the Only Viable Answer for Thinking Christians?

Steve Cable examines Francis Collins’s arguments for theistic evolution from his book *The Language of God* and finds them lacking.

**Francis Collins and Theistic Evolution**

Dr. Francis Collins, recipient of the Presidential Medal of Freedom for cataloging the complete human DNA sequence, put forth his views on science and Christianity in his 2006 book, *The Language of God*. Could his theistic evolution view resolve the apparent conflict between modern science and the Bible? In this article, we will examine this belief and his arguments for it.

Collins grew up agnostic but became an atheist in his student years. At twenty six, he took on the task of proving Christianity false. Like many before him, this hopeless task resulted in accepting Christianity as true: Jesus as God in the flesh bringing us eternal life. In his role as a medical researcher into the genetics of man, he found himself dealing in a world where many questioned the validity of Christian thought as anti-science.

These conflicting forces led him to develop views reconciling the current positions of science and the truths of the Bible. As Collins states, “If the existence of God is true (not just tradition, but actually true), and if certain scientific conclusions about the natural world are also (objectively) true . . ., then they cannot contradict each other. A fully harmonious synthesis must be possible.”

Certainly, this statement is one we all should agree on if we can agree on which scientific conclusions are objectively true.

His resulting beliefs rest on the following premises:

1. God formed the universe out of nothingness 14 billion years ago.
2. Its properties appear to have been precisely tuned for life.
3. The precise mechanism of the origin of life remains unknown,
4. Once evolution got under way, no special supernatural intervention was required.
5. Humans are part of this process, sharing a common ancestor with the great apes.
6. But humans are unique in ways that defy evolutionary explanation, pointing to our spiritual nature.
Rather than interceding as an active creative force, God built into the Big Bang the properties suitable for receiving the image of God at the appropriate time. Purely random mutations and natural selection brought about this desired result. Being outside of time, God would know that this uninvolved approach would result in beings suitable to receive the breath of God.

**The Argument for Theistic Evolution**

Is Francis Collins’ theistic evolution the way to reconcile theology and science?

Collins argues the Big Bang and the fine-tuning of this universe are clearly the work of God. After that, no intelligent intervention occurred, even though scientists have no idea how life began. At some point, God intervened—first, by giving humans moral and abstract thinking, and second, by sending Jesus Christ to perform miracles, be crucified and resurrected, and bring us eternal life.

In Collins’s view, God is allowed to perform miracles to redeem mankind, but not in creating physical humans. The alternative theories make the scientific process messy and unpredictable. This position allows him to side with the naturalist scientists who hold sway today. However, it does not prevent naturalists from laughing at your silly faith.

He also appears to believe we are looking forward to new glorified bodies living in a new earth with Jesus. Apparently, at that time, God will disavow His penchant for not making changes in nature.

Collins wrote that our DNA leads him to believe in common ancestry with chimpanzees and ultimately with all life. His conclusion is partially based on the large amount of “junk DNA” similar across humans and other animals. If similar segments of DNA have no function, these must be elements indicating a common ancestry.

Subsequent research undermines this belief. “DNA previously dismissed as “junk” are... crucial to the way our genome works,... For years,... more than 98% of the genetic sequence... was written off as ‘junk’ DNA.” Based on current research, almost every nucleotide is associated with a function. Over 80% of the genome has been shown to have a biochemical function and “the rest... of the genome is likely to have a function as well.” Collins agrees that his earlier position was incorrect.

In this case, the argument of reuse by an intelligent designer now makes more sense.

On theistic evolution, Collins could be right and it would not tarnish the absolute truth of the Bible. However, in all likelihood, Collins is wrong. From both Scripture and current observations, it appears much more likely God actively interceded in creation.

**Irreducible Complexity**

One area of Intelligent Design Francis Collins attacks is the concept of irreducible complexity.

ID researchers define it as: “[A] system of several well-matched, interacting parts that contribute to the basic function, wherein the removal of any one of them causes the system to cease functioning. [It] cannot be produced directly by slight, successive modifications of a precursor system, because any precursor... that is missing a part is by definition nonfunctional.” A mindless evolutionary process cannot create a number of new, unique parts that must function together before creating any value.

However, Collins believes nothing is too hard for evolution given enough time. He states, “Examples... of irreducible complexity are clearly showing signs of how they could have been assembled by
evolution in a gradual step-by-step process. . . Darwinism predicts that plausible intermediate steps must have existed, . . . ID . . . sets forth a straw man scenario that no serious student of biology would accept.”{12}

One of Collins’s examples, the bacterial flagellum, is “a marvelous swimming device”{13} which includes a propeller surface and a motor to rotate it. ID researchers identify it as an irreducibly complex. Collins suggests this conclusion has been “fundamentally undercut,” stating that one protein sequence used in the flagellum is also used in a different apparatus in other bacteria. “Granted, [it] is just one piece of the flagellum’s puzzle, and we are far from filling in the whole picture (if we ever can). But each such new puzzle piece provides a natural explanation for a step that ID had relegated to supernatural forces, . . .”{14}

Today, seven years later, ID researchers are not backing off. A recent article concludes, “The claim . . . to have refuted . . . the bacterial flagellum is unfounded. Although there are sub-components . . . that are dispensable . . ., there are numerous subsystems within the flagellum that require multiple coordinated mutations. [It] is not the kind of structure that one can . . . envision being produced in Darwinian step-wise fashion.”{15}

Evolutionists have been trying for over 15 years to attack irreducible complexity. Rather than discrediting the theory, their efforts have shown how difficult it is to do so. Collins’s claims put him in the company of those relying on the ignorance of their audience to cow them with logically flawed arguments.

**God of the Gaps and Ad Hominem Attacks**

Francis Collins states, “ID is a ‘God of the gaps’ theory, inserting . . . the need for supernatural intervention in places its proponents claim science cannot explain.”{16}

This statement mischaracterizes Intelligent Design. “ID is not based on an argument from ignorance.”{17} It looks for conditions indicating intelligence was required to produce an observed result. The event must be exceedingly improbable due to random events and it must conform to a meaningful pattern. “Does a forensic scientist commit an ‘arson-of-the-gaps’ fallacy in inferring that a fire was started deliberately. . .? To assume that every phenomenon that we cannot explain must have a materialistic explanation is to commit a converse ‘materialism-of-the-gaps’ fallacy.”{18}

ID researchers identify signs that are consistent with intelligent design and examine real world events for those same signs. In addition, a number of non-ID scientists having reached the conclusion that Darwinism is not sufficient, are looking at other mechanisms to explain certain features of life.

Another aspect of Collins’s defense of theistic evolution is using overstated and unsubstantiated attacks to discredit other views.

Of the young earth creationists, he states, “If these claims were actually true, it would lead to a complete and irreversible collapse of the sciences of physics, chemistry, cosmology, geology, and biology.”{19} This is a gross overstatement. In truth, belief in a young earth creation does not prevent one from making predictions based on micro-evolutionary effects or investigating the physical laws of the universe from a microscopic to an intergalactic level.

Collins also states, “No serious biologist today doubts the theory of evolution.”{20} And, “ID’s central premise . . . sets forth a straw man scenario that no serious student of biology would accept.”{21} So, those differing with Collins are not even serious students of biology. Collins
ignores the over 800 Ph.D.s who signed a document questioning the ability of Darwinian theory to explain life.\footnote{22}

In discrediting ID, he misrepresents the premise of this field, saying ID is designed to resist an atheistic worldview. As one researcher, William Dembski, explains, “Intelligent Design attempts only to explain the arrangement of materials within an already given world. Design theorists argue that certain arrangements of matter, especially in biological systems, clearly signal a designing influence.”\footnote{23}

Collins would rather pursue an answer that was wrong and exclude the actions of an intelligent designer, than consider the possibility of intelligent design.

**Perverting the Views of C. S. Lewis**

Did C. S. Lewis support theistic evolution? Francis Collins quotes Lewis\footnote{24}, postulating God could have added His image to evolved creatures who then chose to fall into sin. Although consistent with theistic evolution, Lewis’ thoughts are more consistent with ID tenets.

Lewis begins, “For long centuries, God perfected the animal form which was to become the vehicle of humanity and the **image of Himself. He gave it** hands whose thumb could be applied to each of the fingers, . . .”\footnote{25} So, God was actively involved in bringing about the human form; God intervened to produce the desired outcome. This view contrasts with Collins’s view that God took whatever evolution produced and breathed into it His image.

BioLogos extends the thought, stating “(Lewis) is clearly a Christian Theistic Evolutionist, or an Evolutionary Christian Theist.”\footnote{26} They point out passages from Lewis showing the evolutionary theory of physical change was not contradictory to the gospel. They suggest Lewis would accept today’s theories as truth and reject ID.

John West’s research\footnote{27} finds Lewis was not saying evolutionary theory was definitely true, but rather that it did not refute Christian belief. Lewis wrote, “belief that Men in general have immortal & rational souls does not oblige or qualify me to hold a theory of their pre-human organic history—**if they have one**.”\footnote{28} In Miracles he wrote, “the preliminary processes within Nature which led up to” the human mind “**if there were any**”—“were designed to do so.”\footnote{29} In both these quotes, Lewis caveats evolutionary theory by adding a big “if.”

Lewis did not embrace a simple-minded view of natural science as fundamentally more authoritative or less prone to error than other fields of human endeavor. Lewis argued that scientific theories are “supposals” and should not be confused with “facts.” . . . We must always recognize that such explanations can be wrong.\footnote{30}

Clearly, Lewis did not feel that a young earth view a necessity. But, he was adamantly against the thought that science trumped theology. Although, one cannot know with certainty, it appears that Lewis would resonate with the methodology and claims of Intelligent Design theorists.

I appreciate Collins’ faith journey. However, I wish he would say “We really don’t know the details of man’s creation, but we know God was intimately involved.”

**Notes**

2. See for example, Josh McDowell’s story in *Undaunted: One Man’s Real-Life Journey from*
Unspeakable Memories to Unbelievable Grace, Lee Strobel’s story in The Case for Faith, and Viggo Olsen’s story in Daktar, Diplomat in Bangladesh.

8. ENCODE is an acronym for the Encyclopedia of DNA Elements project.
13. Behe, Darwin’s Black Box.
18. Ibid.
22. www.dissentfromdarwin.org
25. Lewis, p. 68.
30. West, p. 140-141.

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Are We Significant in This Vast Universe? - The Evidence Supports Belief in God

Steve Cable considers the question of why could we possibly be important in such a vast universe. Current research shows that there are reasons why God needed such a vast universe to house life on this planet. Understanding this idea can make it an apologetic for our faith rather than a fact which detracts from our faith. Science is the study of God’s creation and the more we delve into it the clearer the hand of God becomes.

Why Is the Universe So Vast? Are We Truly Insignificant?

What do you feel when you look at the night sky? Awe? Insignificance? Adoration? Recently, my wife and I took three Ph.D. students from China for an overnight outing at a lake in West Texas. One of the things that impressed them most was the opportunity to view the night sky on a moonless night. Due to “light pollution,” people in most cities can only make out a few hundred stars with the naked eye. These young women had never seen the night sky as King David did when he declared, “The heavens declare the glory of God!” (Psalm 19:1, NASU). They were so taken by the stars and the Milky Way that they spent several hours lying on the dock, looking up at the night sky.

These students were not Christians, and I was glad to have an opportunity to use what we know about the stars to talk to them about the overwhelming evidence for a Creator who is intensely interested in humans. However, another host may have used the same night sky to argue that if there is a God, we must not be very significant to God. Which view is correct? In this article, we will look into the Bible and into current scientific theories to better equip us to answer this important question.

According to the Bible, the transcendent Creator of this universe made humans in His own image as the focal point of His creation. Skeptics of a biblical worldview often point to the vastness of the universe as evidence that humans cannot be the focal point of a theistic creation. The famous astronomer, author, and television personality Carl Sagan put it this way:

> Our posturings, our imagined self-importance, the delusion that we have some privileged position in the Universe, are challenged by this point of pale light. Our planet is a lonely speck in the great enveloping cosmic dark. In our obscularity, in all this vastness, there is no hint that help will come from elsewhere to save us from ourselves. {1}

Famous physicist Stephen Hawking wrote, “Our Solar System is certainly a prerequisite for our existence . . . . but there does not seem to be a need for all these other galaxies.” {2}

In other words, why would God create this huge universe, if He was primarily interested in His relationship with one species occupying a tiny planet?

I think this is a reasonable question. After all, based on observations from the Hubble Telescope, the current best estimate for the number of stars in the observable universe is 5 times 10 to the 22nd
power; that is a 5 with 22 zeros after it. How many stars is that? Well, if you were to count one star every second, it would take you only fifteen hundred trillion years to count them. These stars are spread over billions of light years. Amazingly, all of these stars account for only about 1% of the total mass of the universe. Why did God create such a vast universe, placing us on a single small planet with no reasonable hope of ever traveling beyond our solar system? Does the size of our universe run counter to a biblical worldview?

A Biblical Perspective of Humankind and the Vast Heavens

If God is the Creator of the universe, and the Bible is revelation directly from God, then accurate observation of the universe will ultimately prove to be consistent with His revelation. By combining the general revelation of science with the special revelation of the Bible, we should be rewarded with a greater understanding of the nature of our Creator and His intentions for mankind. Let’s see if this is true in addressing the vastness of the universe.

First let’s consider what God’s special revelation for us, the Bible, has to say about the vastness of the universe. The Bible often refers to God’s creative work in “stretching out the heavens” and filling it with stars (e.g. Job 9:8, Zechariah 12:1). A review of Bible passages on the stars and the heavens reveals a number of reasons why a vast universe is consistent with humans being the most significant part of creation.

We need to realize that creating a vast universe is not harder for God than creating a smaller universe. God brought the universe into existence out of nothing. He had no limits on the amount of matter and energy created. Consequently, it is meaningless to say that it would be a tremendous waste for God to create so many lifeless galaxies. The concept of waste only applies when there is a limited supply. When there is an unlimited supply, you can use all you desire; there is plenty more where that came from.

Within this vast universe, God placed earth in potentially the only place in the universe capable of supporting advanced life. There are many aspects of the universe that are hidden from the casual observer, but the vastness of the heavens is not one of them. God created the earth and positioned it in an ideal place so that humans could observe the vastness of the heavens and the enormous number of stars. The Bible points out at least five purposes for humans observing this vast universe:

1. To reveal His majesty and power. Job refers to this understanding as he reflected on his sufferings stating,

   Who commands the sun not to shine,
   And sets a seal upon the stars;
   Who alone stretches out the heavens
   And tramples down the waves of the sea;
   Who makes the Bear, Orion and the Pleiades,
   And the chambers of the south;
   Who does great things, unfathomable,
   And wondrous works without number.
   Were He to pass by me, I would not see Him;
   Were He to move past me, I would not perceive Him.
   Were He to snatch away, who could restrain Him?
   Who could say to Him, “What are You doing?” (Job 9:7-12).

Later, God confronts Job with His lack of understanding the full power and majesty of His Creator:
Where were you when I laid the foundation of the earth?
Tell Me, if you have understanding, . . . .
Can you bind the chains of the Pleiades,
Or loose the cords of Orion?
Can you lead forth a constellation in its season,
And guide the Bear with her satellites?
Do you know the ordinances of the heavens,
Or fix their rule over the earth? (Job 38:4, 31-33).

As we see in this passage, God intentionally did creative, wondrous works without number so that we could glimpse His greatness.

2. To emphasize our insignificance without God. The vastness of the heavens highlights how insignificant humans are apart from God’s concern for us. The primary lesson that Job learned through his experience was that we are in no position to critique God’s actions over His creation. God’s creation is so vast that any significance we have comes solely from God’s choice to be concerned with us. Job stated it this way: “Behold, I am insignificant; what can I reply to You?” (Job 40:4)

King David was the most significant person in Israel during his reign, but when he considered the vastness of God’s creation he acknowledged our insignificance:

When I consider Your heavens, the work of Your fingers,
The moon and the stars, which You have ordained;
What is man that You take thought of him,
And the son of man that You care for him (Psalm 8:3-4)?

3. As a measure of His loving kindness toward us. God uses the vastness of the heavens to help us understand the magnitude of His love for us, stating, “For as high as the heavens are above the earth, So great is His loving kindness toward those who fear Him” (Psalm 103:11).

God’s love for us is greater than the billions of light years which separate us from the most distant galaxies.

4. As a picture of His faithfulness and forgiveness. In a similar way, God uses our inability to completely grasp the breadth and depth of the universe to emphasize spiritual truths. Through Jeremiah, God promised a new covenant where He will remember our sins no more. God used the vastness of the heavens to convey His promise to never cast those in the new covenant away from Him with these words,

Thus says the LORD, “If the heavens above can be measured
And the foundations of the earth searched out below,
Then I will also cast off all the offspring of Israel
For all that they have done,” declares the LORD (Jeremiah 31:37).

Even today astronomers recognize that the universe we can observe is much smaller than the state of the universe as it exists today. Due to the finite speed of light, it is impossible to directly observe the current size of the universe or count the exact number of stars. Just as the heavens can never be measured, God will never cast us off from His presence.

5. As a reminder that our understanding is limited. Our Creator understands the universe from one end to the other and from the beginning of time to its end. As humans, we are just beginning to
probe its mysteries. So, God reminds us, “For as the heavens are higher than the earth, So are My ways higher than your ways And My thoughts than your thoughts” (Isaiah 55:9).

It is clear that God intended us to observe and study the stars and the heavens. As a part of God’s general revelation, the magnitude of the universe speaks to His greatness. Through God’s special revelation, we see God using the vastness of His creation to teach us lessons about who we are and how we relate to Him. For a Creator who was willing to sacrifice His only Son on the cross for our redemption, it would be child’s play to create a vast universe solely for our instruction. With this understanding, the vastness of the universe becomes a testament to our importance to God rather than evidence of our insignificance.

**A Scientific Perspective of Humankind and the Vast Universe**

If God is the Creator of the universe and the author of the Bible, accurate observation of the universe will ultimately prove to be consistent with His revelation. By combining the general revelation of science with the special revelation of the Bible, we should be rewarded with a greater understanding of the nature of our Creator and His intentions for mankind.

In his book *Why the Universe is the Way It Is*{3}, Hugh Ross points out a number of areas where combining the latest observations of astronomy and physics with biblical theology provides us with fuller answers for some of the tough questions of life. One area he focuses on is the question we have been examining: “Does the vastness of this universe mean that we are insignificant and/or accidental?”

If we assume, as most skeptics and seekers would, that the physical laws of this universe have remained constant from the beginning of the universe until now, then the current state of scientific knowledge points to three reasons why the universe must occupy the mass and volume that it does in order for advanced carbon based life to exist on this planet.

1. **The exact mass of the universe was necessary for life supporting elements to exist.** Life requires heavier elements such as oxygen, carbon, and nitrogen. These elements are produced in the nuclear furnaces of stars. If there were less mass in the universe, only lighter elements such as helium would be produced. If there were more mass, only heavier elements, such as iron, would be produced. In fact, the amount of mass and dark energy in the universe must be fine tuned to less than one part in $10^{60}$ or one part in one trillion trillion trillion trillion trillion, to have a universe that can create a life supporting solar system and planet.

2. **The exact mass of the universe was required to regulate the expansion of the universe to allow the formation of the sun and the solar system.** Amazingly, it turns out that the same total mass that results in the right mix of life supporting elements also results in the right amount of gravity to dampen the expansion of matter across the surface of the space-time continuum to allow the formation of stars like the sun which are capable of supporting a planet like earth. If the universe were expanding faster, stars and solar systems would not form. If the universe were expanding slower, giant stars and black holes would dominate the universe. Once again the total matter in the universe is fine tuned to support life. And what an amazing coincidence: the number that creates the right mix of elements also creates the right expansion rate. This dual fine tuning is much less likely than achieving the financial returns guaranteed by Bernie Madoff!

3. **The vast volume of the universe is required to give the earth just the right amount of light and other electromagnetic radiation to support life and not destroy it.** Life not only requires a planet with the right mix of elements orbiting the right kind of sun in just the right solar system; it also requires
a “just right” galactic environment. Astronomers has discovered what they call “the galactic
habitable zone” for our Milky Way galaxy at a distance of about 26,000 light years from the center of
the galaxy. Any planet closer to the center will experience deadly radiation levels. Any planet further
away from the center would lack the mix of heavy elements necessary for advanced life. But the vast
majority of this habitable zone is inside one of the uninhabitable spiral arms of the galaxy. Since
stars revolve around the galactic center at a rate different than the spiral arm structure based on
their distance from the center of the galaxy, most solar systems pass through deadly spiral arms
over the course of time. Our solar system occupies a very special place as Hugh Ross points out:
“The solar system holds a special position in the Milky Way . . . the one distance from the core where
stars orbit the galaxy at the same rate as its spiral arm structure does.”{4}

Once again we are faced with a divine “coincidence”: the same fine-tuned distance required to safely
place a habitable planet is also the exact distance required to keep that planet out of the deadly
spiral arms.

Not only must the earth be located far from the center of the Milky Way, the Milky Way must be
located far enough away from other galaxies to maintain the stability of its spiral structure. Many
aspects of the Milky Way appear to be very rare or unique in the universe.

As you can see, a logical application of current scientific orthodoxy based on the Big Bang and
constant natural laws overwhelmingly supports the view that the vastness of the universe does not
imply that human life is unremarkable and insignificant. On the contrary, the most reasonable
conclusion from the evidence is that life on this planet is the primary purpose behind the vastness of
our universe. Both the Bible and the results of scientific observation agree: our vast universe is the
work of a Creator who considers life on earth as very significant.

Consequently, we don’t have to convince a seeker that the world is much younger than it appears in
order to answer the question, “Are we significant to our Creator?” We can say, “Whether you look to
the teaching of the Bible or you look at the current prevailing models from the scientific community,
the answer is definitely yes!” The important question is, “Is it possible to know more about my
Creator and have a relationship with Him?” Beginning with the death and resurrection of Jesus, we
can explain how to have an eternal relationship with God and why we believe the Bible is the reliable
source of information about our Creator and our universe.

• Check out our article “The Answer is the Resurrection” at Probe.org for more information on using
the resurrection to respond to key questions from seekers.
• For more information on topics related to the origins of our universe and other science topics,
check out our Faith and Science section.
• For further discussion on the age of the universe see “Christian Views of Science and Earth
History” in our Faith and Science section.
• For further discussion of how the age of the universe debate relates to this discussion see
Appendix A: Theology vs. Science or Theology plus Science? and Appendix B: Apologetics and the
Age of the Universe.

Notes

1994).
2. Stephen Hawking, A Brief History of Time: From the Big Bang to Black Holes (New York: Bantam,
1988).
Redesigning Humans: Is It Inevitable?

Is genetic technology just the next step in human discovery about ourselves, or does it mean the end of humanity as we know it? Could we literally redesign humanity out of existence? On the other hand, there are those who maintain that we are headed down a disastrous technological and ethical road.

The People Are Restless

There is a general unease in the wind. People are a little squeamish concerning the coming revolution in biotechnology. There is a sort of stand-offish fascination where we wonder at the possibilities for curing genetic diseases and even for making ourselves smarter, prettier, or stronger. Yet we shrink from the potential horror of the world we might create for ourselves with no hope of turning back.

We have faced such forks in the road before. Every new technology has presented fantastic benefits and uncertain costs. Gunpowder, electricity, the combustion engine, atomic energy, etc., have all offered tantalizing either/or tensions. Some of these tensions we still live with, such as the threat of nuclear weapons and encroaching pollution from combustion engines.

But for the most part we have been able to develop a stable coexistence between the potential for good and the potential for evil. Weapons have become more precise, minimizing unnecessary collateral casualties, the combustion engine has become cleaner and more efficient, and atomic weapons so far have been remarkably harnessed.

But what about genetic technology? Is this just the next step in human discovery about ourselves, or does it mean the end of humanity as we know it? Could we literally redesign humanity out of existence? There are voices in our culture today that will tell us that indeed we can and we will and it is inevitable and “you’d just better get used to it.”

On the other hand there are those who maintain that we are headed down a disastrous road, and that we have a small opportunity to harness the benefits of the new technologies while minimizing and corralling the hazards.

I recently spent several days at the United World College in New Mexico developed by the late Armand Hammer, one of several upper high schools around the world for the best and brightest. The occasion was a student-led conference organized for discussing the ethics of human genetic engineering and cloning. Three other invited guest speakers and I spent two days with the 200 students from around the world and the UWC faculty and staff.
About fifty of the students were from a variety of backgrounds from here in the U.S., and the other 150 were from almost ninety countries. Their knowledge and perspectives on human genetic engineering ran from those who saw few problems and were perplexed by those with reservations to those who held all such technologies at arm’s length and couldn’t understand why anyone would want to do such things.

Who’s right? Beyond that, What have we done already? And is there any opportunity for science and society to meet together to figure this out? In this program we will hear from several voices and see if we can navigate the coming genetic mine fields.

Is There a Posthuman Future?

One of participants at the UWC conference designated himself a “transhumanist.” Transhumanists are among those who welcome with open arms the possibilities of genetic engineering to alter who and what we are. They scoff at the reluctance of others to step into this coming Brave New World. They relish the possibilities of double and triple average life-expectancy, designer babies, and the elimination of genetic disease. They aren’t troubled by the necessity of costly mistakes and failures. That’s just the price of research and progress. We accept risk all the time, they say. Why should genetic research be any different? They apply rather consistently a naturalistic worldview which sees human beings as just another species. We certainly aren’t made in the image of God, they say, so why is our current genetic structure sacred?

Gregory Stock opened his 2002 book, *Redesigning Humans: Our Inevitable Genetic Future*, this way: “We know that *homo sapiens* is not the final word in primate evolution, but few have grasped that we are on the cusp of profound biological change, poised to transcend our current form and character to destinations of new imagination.”{1}

Stock rightly points out that we have already started down the road of genetic manipulation of our species. Several fertility clinics in the U.S. already offer preimplantation genetic diagnosis or PGD. This procedure screens newly created embryos by in vitro fertilization for a few genetic diseases such as Tay Sachs, cystic fibrosis, and hemophilia. You can also have the embryos screened for sex selection. Some clinics even offer sex selection as the sole purpose of your visit to the clinic.

One couple from Wyoming had fourteen embryos created by in vitro. Seven were male, seven were female. They chose three females to be implanted to ensure their fourth child was a girl after three boys. The technique is virtually 100% effective. Less efficient sperm selection techniques are only 91% effective for girls and only 76% effective for boys.{2} But should we be selecting the sex of our children?

Over one million IVF babies have been born worldwide, around 28,000 in the U.S.—roughly 1% of newborns. This may soon become the “natural” way once more procedures become available to design our own babies. We may recoil today at the thought of designer babies, but we also recoiled twenty-five years ago against the thought of test-tube babies.

Stock closes his book by saying, “We are beginning an extraordinary adventure that we cannot avoid, because, judging from our past, whether we like it or not this is the human destiny.”{3} But is it?

What’s So Wrong With Tinkering With Our DNA?

Couples are already being given the power to choose the sex of their child, even at the cost of simply rejecting the embryos that are the wrong sex. But our technology is advancing rapidly to allow a far
broader array of genetic choices.

Gene therapy, the ability to transfer a normal human gene into the affected tissues of a person affected by a single gene disease, has been pursued for over ten years. So far results have been disappointing. That is partly the reason why many are looking for improved ways to add genes to the earliest one cell stage embryo so the gene can be spread to all tissues at once. This process is also rather inefficient in animals, successful only about 1% of the time.

But this does not deter some because they already view the embryo, before fourteen days after conception, as little more than reproductive cells and not yet worthy of being declared human. If this definition holds, embryos can be wasted as long as a supply of human eggs is readily available. In addition to preimplantation genetic diagnosis (PGD) for sex selection and selection of embryos that are free of cystic fibrosis, Tay Sachs, hemophilia, and other genetic diseases, other genetic technologies are on the near horizon.

Researchers have already devised artificial chromosomes. These chromosomes pass on stably over several generations in mice. They have been tested successfully in human tissue culture, and have remained stable over dozens of cell divisions. No one has added foreign genes to these chromosomes, but that is the plan: to provide a safe and effective means of adding genes to embryos and have them distributed to all tissues and to succeeding generations.

Genetic futurist Gregory Stock summed it up when he said, “Breakthroughs in the matrixlike arrays called DNA chips, which may soon read thirty thousand genes at a pop; in artificial chromosomes, which now divide as stably as their naturally occurring cousins; and in bioinformatics, the use of computer-driven methodologies to decipher our genomes—all are paving the way to human genetic engineering and the beginnings of human biological design.”

Some may scoff at these projections, but people seem quite willing around the world to consider taking advantage of technologies that can genetically enhance themselves or their offspring. “In a 1993 international poll, Daryl Mercer, director of the Eubois Ethics Institute in Japan, found that a substantial segment of the population of every country polled said they would use genetic engineering both to prevent disease and to improve the physical and mental capacities inherited by their children. The numbers ranged from 22 percent in Israel and 43 percent in the United States to 63 percent in India and 83 percent in Thailand.” So what’s the problem?

What’s Our Next Step?

I believe that being able to genetically redesign human beings is far closer than most people realize. Not only is the technology developing at an ever-increasing rate, but people are also far more willing to consider using such technologies than most would want to think.

I hope my tone in this article has indicated that I have deep reservations about this seemingly inevitable future. But why do I say this is inevitable? And why would I have reservations about taking this next step?

I believe that at least trying to alter ourselves genetically is inevitable because the technology is developing rapidly using animal models. And whatever we have done in animals, we eventually do in humans. The naturalistic worldview says quite strongly that we are just another animal species. If our understanding of our own genetics continues to increase and we gain the technology to correct our defects and faults, the naturalist says, Why not?!

Society and governments have put few barriers in the way of scientists and researchers from simply
taking the next logical step. So far, we have been unwilling to say that there are some experiments we will not do. Even though most will say they are against human cloning—even scientists—that figure is changing, and we have few reasons for our objections besides the fact that it is not yet safe. If it does become safer, the public will have little room to say no. We’ve painted ourselves into a bit of a corner.

In regard to genetic engineering, we are easily swayed by appeals to eliminate genetic diseases without considering how difficult it is to delineate between curing genetic disease and producing genetic enhancements. James Watson, co-discoverer of the structure of DNA and Nobel Laureate, exposes our difficulty with two penetrating statements. Concerning curing genetic disease he said, “What the public wants is not to be sick and if we help them not to be sick, they’ll be on our side.”{6} In another context Watson would have left most people dead in their tracks when he said, “No one really has the guts to say it, but if we could make better human beings by knowing how to add genes, why shouldn’t we?”{7}

Leon Kass, chairman of President Bush’s Council on Bioethics, put it quite succinctly when he said, “The first thing needful is a correction and deepening of our thinking.”{8} When I speak to young people in particular, I almost plead with them to pay attention in biology class. These genetic choices will probably begin to be available to today’s high school students as they marry and begin their families. They and we need to be better prepared.

**How Will the Church Be Challenged?**

There are just a few voices warning of the coming challenges and opportunities of the developing crisis over human dignity as the diesel engine of human genetic technology gains momentum and steam. Some fear it may already be beyond the point of no return and believe we’d better figure out how we are going to cope with our inevitable future of redesigned humans.

Leon Kass’s book, *Life, Liberty, and the Defense of Dignity*, is a good place to start. Though not a Christian, Kass dances around the edges of a Christian or theistic worldview that at least acknowledges that there is a human design in place that we need to be mindful of before we head out at breakneck speed to change who and what we are.

Kass sees that our efforts to redesign humans challenge our very dignity and identity as human beings. If parents have constructed the best child for them using the best available technology they can afford, are they still parents, or creators and owners with additional rights and privileges? A child becomes a commodity to be designed, manufactured, and even sold. Love and nurture will turn to management and stimulation.

Gregory Stock is the director of the Program on Medicine, Technology and Society at the UCLA School of Medicine. His book, *Redesigning Humans: Our Inevitable Genetic Future*, will sober you up quite quickly. Stock is a naturalist and has little patience with those who would hold back our genetic future. He is knowledgeable and unflinching about the possibilities. One commentator wrote; “This is the most important book ever written about what we could do to make better people. I could not put this book down because it challenged everything I knew about human nature.” I would agree.

In my travels I have found the church to be largely unaware of how close we are to Stock’s vision of redesigning humans. Within a few short decades our children will be pressured to alter their children genetically to keep up with society. Scientific research may well make use of human embryos as matter of fact research subjects. This may likely extend to developing fetuses, and it will all in the name of furthering health and eliminating disease.
How will we react? The Barna Research Group tells us over and over again that the Christian community does not think or act in an appreciatively different manner than society at large. That means these genetic technologies will find their way into the church. There will be a new source of discrimination to deal with. No longer will churches be segregated by economic status and race but by genetic pedigree as well.

Do we really think we can improve on or maybe at least recover the original design? There may be a new Tower of Babel on our horizon. We must take seriously this threat to our future, both of humanity and the church.

Notes

4. Ibid., 13.
5. Ibid., 58.
7. Quoted in Stock, 12.

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**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, CO₂, 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 CO₂ 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? CO₂ 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

Atheist Myths and Scientism

Steve Cable exposes some atheist myths and the false ideology of scientism, all designed to destroy people’s faith.

A Two-Pronged Attack Against Christianity

Atheist attacks against American Christianity are gaining more traction in our society. Their success can be readily seen in the growth of the number of American young adults who do not profess to be Christians. Tracking recent trends, around 50% of American Millennials fall in this category, with most of those identifying as atheist, agnostic or nothing in particular. More identify as nothing in particular than as atheist, but the atheist attacks certainly have a role to play in their ambivalent feelings about Christianity.

What have atheists done to create a cultural milieu that is drawing more and more young Americans away from Christianity? In this article, we will focus on two prominent prongs of the attack against Christianity. Those prongs are:

1. Fabricating myths around the premise that Christianity and modern science are enemies of one another and have been so since the advent of modern science, and

2. Promoting the philosophy of scientism as the only way to view science.

First, the myths are an attempt to cause people to believe that the Christian church and a Christian worldview were and are anti-science. They want us to believe that the findings of science are counter to the make-believe teachings of Christianity and the Bible. They want us to look back at history and believe that the church was actively opposing and trying to suppress scientific knowledge. As Michael Keas tells us in his 2019 book Unbelievable, “These stories are nothing but myths. And yet some leading scientists . . . offer these stories as unassailable truth. These myths make their way into science textbooks . . . (and) enter into popular culture, whereby the myths pass as accepted wisdom.”{1}

However, many historians and philosophers have correctly pointed out that the Christian worldview of an orderly universe created by an involved God produced the mindset that gave birth to the
scientific revolution. In his book How the West Won, sociologist Rodney Stark states, “Christianity was essential to the rise of science, which is why science was a purely Western phenomenon . . . science only arose in Christian Europe because only medieval Europeans believed that science was possible and desirable. And the basis of their belief was their image of God and his creation.”{2} In this article, we consider the key figures who propagated this myth and some of the falsified stories they have foisted upon us.

Second, they want us to accept scientism as the only valid way to view the role of science in our understanding of the universe. What is scientism? In his 2018 book Scientism and Secularism, professor of philosophy J. P Moreland defines it this way: “Scientism is the view that the hard sciences provide the only genuine knowledge of reality. . . . What is crucial to scientism is . . . the thought that the scientific is much more valuable than the non-scientific. . . . When you have competing knowledge claims from different sources, the scientific will always trump the non-scientific.”{3}

But scientism “is not a doctrine of science; rather it is a doctrine of philosophy . . . (In fact,) scientism distorts science.”{4} This philosophical doctrine came into favor among the public not because of scientific results, but rather as the result of proponents presenting it in popular ways as if it were the undisputable truth. As Moreland points out, “It is not even a friend of science but rather its enemy.”{5}

**Myths about Christianity and Science**

Atheists want to create stories to demonstrate that Christians are and have been the enemies of scientific exploration and discovery. Why this drive to recreate the past? They want to encourage people to turn away from Christianity as an enemy of science and weaken the faith of believers.

As Michael Keas makes evident in Unbelievable, this thinking is not based on reality. Instead, historical myths have been created to bolster their position either as a result of ignorance of the actual history or intentional deceit. After creating these myths, they use the educational system and mass media to ingrain these myths into the thinking of the masses.

Keas specifically looks at seven myths used for this purpose which we find embedded in our textbooks and proclaimed by popular television programs. To understand the nature of these myths, let’s consider two of the ones discussed by Keas.

Many of you learned of the Dark Ages, a period of time between A.D. 500 and 1500 where textbooks have claimed that science and the arts were stifled by the control of the church which opposed scientific understanding. In truth, this view is not supported by historical evaluations of that time. As reported in Stark’s revealing book, How the West Won, “Perhaps the most remarkable aspect of the Dark Ages myth is that it was imposed on what was actually “one of the great innovative eras of mankind.” During this period technology was developed and put into use on a scale no civilization had previously known.{6} Keas found that this myth first appeared in textbooks in the 1800s but did not surface with an anti-Christian slant until the 1960s. Carl Sagan, and later Neal deGrasse Tyson, would help promulgate this myth on television through their Cosmos series.

Another myth exploded by Keas is that “Copernicus demoted humans from the privileged ‘center of the universe’ and thereby challenged religious doctrines about human importance.”{7} In fact, Copernicus as a Christian did not consider his discovery that the earth orbited the sun a demotion for earth or humans. What Copernicus saw as unveiling the mysteries of God’s creation over time
began to be pictured as a great humiliation for Christians. In the 1950s some scientific writers began using the term “the Copernican principle” to refer to the idea “that the Earth is not in a central, specially favored position”\(^8\) in the cosmos. As one Harvard professor has noted, “This is the principle of mediocrity, and Copernicus would have been shocked to find his name associated with it.”\(^9\)

Keas also documents how this atheist strategy also pretends that many early scientists were not Christians. Johannes Kepler, known for his discovery of the three laws of planetary motion, is cited by Sagan in Cosmos as someone who “despaired of ever attaining salvation,”\(^10\) implying that Kepler always felt this way. Sagan leads one to believe that in his astronomical discoveries Kepler was somehow freed from this concern. Yet from Kepler’s own writing it is very clear that he was a Christian, telling people shortly before his death that he was saved “solely by the merit of our savior Jesus Christ.” And speaking of his scientific endeavors he wrote, “God wanted us to recognize them [i.e. mathematical natural laws] by creating us after his own image so that we could share in his own thoughts.”\(^11\)

Much of the reported relationship between science and Christianity is a myth made up to strengthen the atheist position that science repudiates Christianity and makes it superfluous and dangerous in today’s enlightened world. Nothing could be further from the truth, as a Christian worldview was foundational for the development and application of the scientific method.

**Methodological Naturalism: A Farce**

What about the prevalence of scientism, a belief system claiming that the hard sciences provide the only genuine knowledge of reality?

When considered carefully, the whole concept of scientism is a farce. Why? Because as philosopher J. P. Moreland points out, “Strong scientism is a philosophical assertion that claims that philosophical assertions are neither true nor can be known; only scientific assertions can be true and known.”\(^12\) So the premise is self-refuting. They are saying that only scientific facts can be objectively true. Thus, the statement that only scientific facts can be true must be false because it is a philosophical assertion, not a scientific fact.

Another example of the faulty philosophy behind scientism comes in their insistence on adopting methodological naturalism as a criterion for science. Methodological naturalism is “the idea that, while doing science, one must seek only natural causes or explanations for scientific data.”\(^13\) This idea immediately demotes science from being the search for the truth about observable items in this universe to being the search for the most plausible natural cause no matter how implausible it may be.

Although they appear to be unsure as to whether to apply the concept uniformly to all forms of science, its proponents are sure that it definitely should be applied to the field of evolutionary science. They make the *a priori* assumption that life as we know it originated and developed by strictly impersonal, unintelligent forces. No intelligence can be allowed to enter the process in any way. This approach to trying to understand the current state of life on earth is certainly an interesting exercise leading to a multitude of theories and untestable speculations. It is a challenging mental exercise and is valuable as such. However, scientism does not stop there. They declare that their unsupported (and I would say unsupportable) theories must be the truth about our origins, at least until replaced by another strictly naturalistic theory.

This approach seems to be an odd (and unfruitful) way to go after the truth due to at least three
reasons. First, many other areas of science which include intelligent agents in their hypotheses are respected and their results generally accepted, common examples being archaeology and forensic science. Second, the current state of evolutionary science primarily appears to be tearing holes in prior theories, e.g. Darwinian evolution, rather than closing in on a plausible explanation. And, third, scientists are continuing to find evidence supporting a hypothesis that intelligent actions were involved in the formulation of life on earth.

If the sum of the available evidence is more directly explained by the involvement of some intelligent agent, then it would be reasonable to accept that potential explanation as the leading contender for the truth until some other answer is developed that is more closely supported by the available evidence. This is the attitude embraced by the intelligent design community. They embrace it because so much of the evidence supports it, including

1. the inability of other hypothesis to account for the first appearance of life,
2. the complexity of the simplest life forms with no chain of less complex forms leading up to them,
3. the relativity sudden appearance of all types of life forms in the fossil record,
4. the fine tuning of the parameters of the universe to support life on earth, and
5. the emergence of consciousness within humans.

In contrast, those supporting theistic evolution appear to do so in order to conform to the methodological naturalism of their peers. They claim to believe that God does intervene in nature through acts such as the miracles of Jesus and His resurrection. But they claim that God did not intervene in the processes leading up to the appearance of mankind on this planet. In my opinion, they take this stance not because the evidence demands it, but because methodological naturalism does not allow it. As Moreland opines, "Methodological naturalism is one bad way to put science and Christianity together."{14}

**Things Science Cannot Explain / God of the Gaps**

As we have seen, scientism is a philosophy that says the only real knowledge to be found is through application of the hard sciences and that no intelligence can be involved in any of our hypotheses. So, they believe hard science must be capable of explaining everything (even if it currently doesn’t).

In this section we will consider some very important things that science cannot now nor ever be able to explain. In his book, *Scientism and Secularism*, J. P. Moreland lists five such things for us.

**First, the origin of the universe** cannot be explained by science. Why? Science has been able to identify that the universe most likely had a beginning point. But as Moreland points out, “Science can provide evidence that the universe had a beginning; it cannot, even in principle, explain that beginning; that is, it cannot say what caused it. . . No real thing can pop into existence from nothing.”{15} He points out three specific logical reasons science cannot address this issue:

1. A scientific explanation cannot be used to explain the universe because scientific explanations presuppose the universe.
2. Science cannot explain the origin of time and without time no explanation can be considered.
3. Coming-into-existence is not a process which can be reviewed and explained because it is an instantaneous event. Something either does or does not exist.

**Second, the origin of the fundamental laws of nature.** All scientific explanations presuppose
these laws. We can conceive of a universe where these laws might be different resulting in a
different reality, but we cannot explain how our universe came into being with the laws we see
active around us.

**Third, the fine-tuning of the universe** to support life. As far as science is concerned the
parameters of the forces within this universe can be observed but we cannot know what caused
them to assume the values they do. However, in recent years it has been discovered that our
universe “is a razor’s edge of precisely balanced life permitting conditions.”{16} Over one hundred
parameters of this universe, such as the force of gravity, the charge of an electron, the rate of
expansion of the universe, etc., must be precisely balanced or there could be no life in the universe.
Science cannot answer the question of why our universe can support life.

**Fourth, the origin of consciousness.** In this context consciousness is the ability to be aware of
oneself and entertain thoughts about things which are outside of oneself and possibly outside of
one’s experience. From a naturalist point of view, “the appearance of mind is utterly unpredictable
and inexplicable.”{17} However, God may choose to create conscious beings; beings that are
capable of asking about and discovering the works of their creator.

**Fifth, the existence of moral laws.** As the late atheist philosopher Mackie admitted, the
emergence of moral properties would constitute a refutation of naturalism and evidence for theism:
“Moral properties constitute so odd a cluster of properties and relations that they are most unlikely
to have arisen in the ordinary course of events without an all-powerful god to create them.”{18}

These five important questions can never be answered if scientism’s flawed premise were true.
However, Christian theism answers each of these questions and those answers are true if God is the
real creator of the universe.

Integrating Christianity and Science

Scientism claims that you cannot integrate Christianity and science. Instead, they claim all theology
is nonsense and only science exists to give us the truth. As Moreland points out, “One of the effects
of scientism, then, is making the ridicule of Christianity’s truth claims more common and acceptable
(which is one of scientism’s goals).”{19}

If this view is clearly wrong, how should we as Christians view science and its relationship with
Christianity and the Bible? First, we need to understand that the topics addressed by science are in
most cases peripheral to the topics covered in the Bible. The Bible is primarily concerned with God’s
efforts to restore people from their state as enemies of God back into eternal fellowship with Him.

One area of significant interaction is the question of how this universe came to exist in its current
state. How one views that interaction (i.e. as adversarial or as complementary) depends on whether
they are clinging to the unsupported myth of unguided evolution or to the new science of intelligent
design. As Moreland states, “Science has done more to confirm the Christian God’s existence than to
undermine it, and science has provided little or no evidence against belief of theism. Science has,
however, raised

challenges to various biblical texts, and Christians need to take those challenges seriously.”{20}

Moreland suggests there are five ways to relate issues in science and Christian philosophy. Let’s
consider two of those methods. One is the complementarity model. In this model, two disciplines are
addressing the same object or feature but from different, essentially non-overlapping perspectives.
“Neither one purports to tell the whole story, but both make true claims about reality.”{21} This is
the model used by advocates of theistic evolution who take as gospel the latest claims of evolutionary science while saying of course God kicked off the whole process including us in His plan for the universe.

Another way to interact is called the direct interaction model. In this model, theories from theology and from science may directly interact with one another on some topic, either positively or negatively. One area might raise rational difficulties for the other. This approach has the most potential for bringing information from different fields together into a fuller picture of truth. Intelligent design is an area where this model is applied as it questions the validity of eliminating intelligence from the options considered in understanding the development of life on earth.

Since scientism swears that science is the only source of truth, even when scientists cannot agree as to what that scientific truth is, they want to discount inputs from any other source no matter how helpful. So the direct interaction model is a difficult road to take. What are the rational criteria for going against the experts? Moreland suggests there are four criteria for Christian theologians to decide to take this road.

1. Make sure there is not a reasonable interpretation of the Bible that resolves the tension.
2. There is a band of academically qualified scholars who are unified in rejecting the view held by a majority of the relevant experts. In this way, we know that there are people who are familiar with the details of the majority view, who do not believe that it is true.
3. There are good non-rational explanations for why the expert majority holds the problematic view. For historical, sociological, or theological reasons, the majority is not ready to abandon their position rather than because their evidence is overwhelming. “For example, the shift from creationism to Darwinism was primarily, though not exclusively, a shift in philosophy of science.”{22}

Given the large amount of evidential support for a Christian worldview, any view that is counter to central components of a Christian worldview should be rejected precisely for that reason. Any view meeting the first three criteria that also attempts to undermine key parts of a Christian worldview will be overwhelmed by the significant rational support for a Christian worldview.

As followers of the God of real truth, Christians need to realize that the so-called truths being taught to justify science over theology are in fact myths and/or self-refuting statements. Every Christian needs to be able to address these fallacies in today’s popular science culture. Equip your young adults with this understanding and more by attending our summer event called Mind Games Camp. More information can be found at probe.org/mindgames.

Notes

4. Ibid., p. 23.
5. Ibid., p. 55.
6. Stark, p. 76.
The Five Crises in Evolutionary Theory

Dr. Ray Bohlin discusses five crises in evolutionary theory: 1) the unsubstantiation of a Darwinian mechanism of evolution, 2) The total failure of origin of life studies to produce a workable model, 3) The inability of evolutionary mechanism to explain the origin of complex adaptations, 4) The bankruptcy of the blind watchmaker hypothesis, and 5) The biological evidence that the rule in nature is morphological stability over time and not constant change.

The Case of the Missing Mechanism

The growing crisis in Darwinian theory is becoming more apparent all the time. The work of creationists and other non-Darwinians is growing and finding a more receptive ear than ever before. In this discussion I want to elaborate on what I believe are the five critical areas where Darwinism and evolutionary theory in general are failing. They are:

1. The unsubstantiation of a Darwinian mechanism of evolution
2. The total failure of origin of life studies to produce a workable model
3. The inability of evolutionary mechanism to explain the origin of complex adaptations
4. The bankruptcy of the blind watchmaker hypothesis
5. The biological evidence that the rule in nature is morphological stability over time and not constant change.

Much of the reason for evolution’s privileged status has been due to confusion over just what people mean when they use the word evolution. Evolution is a slippery term. If evolution simply means “change over time,” this is non-controversial. Peppered moths, Hawaiian drosophila fruit flies, and even Galapagos finches are clear examples of change over time. If you say that this form of evolution is a fact, well, so be it. But many scientists extrapolate beyond this meaning. Because “change over time” is a fact, the argument goes, it is also a fact that moths, fruit flies, and finches all evolved from a remote common ancestor. But this begs the question.
The real question, however, is where do moths, flies, and finches come from in the first place? Common examples of natural selection acting on present genetic variation do not tell us how we have come to have horses, wasps, and woodpeckers, and the enormous varieties of living animals. Evolutionists will tell you that this is where mutations enter the picture. But mutations do not improve the scenario either. In speaking of all the mutation work done with bacteria over several decades, the great French zoologist and evolutionist Pierre-Paul Grasse’ said:

What is the use of their unceasing mutations if they do not change? In sum, the mutations of bacteria and viruses are merely hereditary fluctuations around a median position; a swing to the right, a swing to the left, but no final evolutionary effect.

When I speak of evolution or Darwinism, it is the origin of new biological forms, new adaptive structures, morphological and biochemical novelties that I am referring to. This is precisely what has not yet been explained. When people question the popular explanations of the origin of complex adaptations such as the vertebrate limb, or sexual reproduction, or the tongue of the woodpecker, or the reptilian hard-shelled egg, they are usually given a litany of reasons why these structures are beneficial to the organisms. More precisely, the selective advantage of these structures is offered as the reason they evolved. But this begs the question again. It is not sufficient for an evolutionist to explain the function of a particular structure. What is necessary is to explain the mechanistic origin of these structures!

Natural selection does explain how organisms adapt to minor changes in their environment. Natural selection allows organisms to do what God commanded them to do. That is to be fruitful and multiply. Natural selection does not, however, explain the crucial question of how complex adaptations arose in the first place.

The Origin of Life

We have been led to believe that it is not to difficult to conceive of a mechanism whereby organic molecules can be manufactured in a primitive earth and organize themselves into a living, replicating cell. In fact, the ease by which this can (allegedly) happen is the foundation for the popular belief that there are numerous planets in the universe which contain life. Nothing could be further from the truth.

Early experiments suggested that it was relatively simple to produce some of the building blocks of life such as amino acids, the components of proteins. However, the euphoria of the Miller- Urey experiment of 1953 has given way to a paradigm crisis of 1993 in origin of life research. The wishful, yet workable atmosphere of ammonia, hydrogen, methane, and water vapor has been replaced by the more realistic, but stingy atmosphere of nitrogen, carbon dioxide, carbon monoxide, hydrogen sulfide, and hydrogen cyanide. This is the stuff that volcanoes belch out. This atmosphere poses a much more difficult challenge. Molecules relevant for life would be much rarer. Even more damaging is the possibility of the presence of molecular oxygen in the atmosphere from the break-up of water vapor. Molecular oxygen would poison any reaction leading to biologically significant molecules.

Coacervates, microspheres, the “RNA world,” and other scenarios all have serious flaws obvious to everyone in the field except those who continue work with that particular scenario. Some have privately called this predicament a paradigm crisis. There is no central competing model, just numerous ego-driven scenarios. Even the experiments in which researchers try to simulate the early earth have been severely criticized. These experiments generally hedge their bets by using purified reactants, isolated energy sources, exaggerated energy levels, procedures which unrealistically drive the reaction toward the desired product and protect the products from the destructive effects
of the energy sources which produced them in the first place.

The real situation was summed up rather well by Klaus Dose:

> More than 30 years of experimentation on the origin of life in the fields of chemical and molecular evolution have led to a better perception of the immensity of the problem of the origin of life on earth rather than to its solution. At present all discussions on principal theories and experiments in the field either end in stalemate or in a confession of ignorance.” [From Interdisciplinary Science Review 13(1988):348-56.]

But all of these difficulties together, as staggering as they are, are not the real problem. The major difficulty in chemical evolution scenarios is how to account for the informational code of DNA without intelligence being a part of the equation. DNA carries the genetic code: the genetic blueprint for constructing and maintaining a biological organism. We often use the terms of language to describe DNA’s activity: DNA is “transcribed” into RNA; RNA is “translated” into protein; geneticists speak of the “genetic code.” All these words imply intelligence, and the DNA informational code requires intelligent preprogramming, yet a purely naturalistic beginning does not provide such input. Chemical experiments may be able to construct small sequences of nucleotides to form small molecules of DNA, but this doesn’t make them mean anything. There is no source for the informational code in a strictly naturalistic origin of life.

**The Inability to Account for Complex Adaptations**

Perhaps the single greatest problem for evolutionary biologists is the unsolved problem of morphological and biochemical novelty. In other words, some aspects of evolutionary theory describe accurately how existing organisms are well adapted to their environments, but do a very poor job of explaining just how the necessary adaptive structures came about in the first place.

Darwinian explanations of complex structures such as the eye and the incredible tongue of the woodpecker fall far short of realistically attempting to explain how these structures arose by mutation and natural selection. The origin of the eye in particular, caused Darwin no small problem. His only suggestion was to look at the variety of eyes in nature, some more complex and versatile than others, and imagine a gradual sequence leading from simple eyes to more complex eyes. However, even the great Harvard evolutionist, Ernst Mayr, admits that the different eyes in nature are not really related to each other in some simple-to-complex sequence. Rather, he suggests that eyes probably had to evolve over forty different times in nature. Darwin’s nightmare has never been solved. It has only been made 40 times more frightening for the evolutionist.

In his 1987 book, *Theories of Life*, Wallace Arthur said:

> One can argue that there is no direct evidence for a Darwinian origin of a body plan—black *Biston Betularia* certainly do not constitute one! Thus in the end we have to admit that we do not really know how body plans originate.

In 1992, Keith Stewart Thomson wrote in the *American Zoologist* that:

> While the origins of major morphological novelties remain unsolved, one can also view the stubborn persistence of macroevolutionary questioning...as a challenge to orthodoxy: resistance to the view that the synthetic theory tells us everything we need to know about evolutionary processes.

The ability to explain major morphological novelties is not the only failing of evolutionary theory.
Some argue that molecular structures are even more difficult to explain. The molecular architecture of the cell has recently described by molecular biologist Michael Behe as being irreducibly complex systems which must have all the components present in order to be functional. The molecular workings of cilia, electron transport, protein synthesis, and cellular targeting readily come to mind. If the systems are irreducibly complex, how do they build slowly over long periods of time out of systems that are originally doing something else?

While publishing hundreds of articles pertaining to molecular homology and phylogeny of various proteins and nucleic acids over the last ten years, the *Journal of Molecular Evolution* did not publish one article attempting to explain the origin of a single biomolecular system. Those who make molecular evolution their life’s work are too busy studying the relationship of the cytochrome c molecule in man to the cytochrome c molecule in bacteria, rather than the more fundamental question of where cytochrome c came from in the first place!

Clearly then, whether we are talking about major morphological novelties such as the wings of bats and birds, the swimming adaptations of fish and whales, the human eye or the molecular submicroscopic workings of mitochondria, ribosomes, or cilia, evolutionary theory has failed to explain how these structures could arise by natural processes alone.

**The Bankruptcy of the Blind Watchmaker Hypothesis**

In his 1986 book, *The Blind Watchmaker*, Richard Dawkins states, “Biology is the study of complicated things that give the appearance of having been designed for a purpose.” He explains that

> Natural selection is the blind watchmaker, blind because it does not see ahead, does not plan consequences, has no purposes in view. Yet the living results of natural selection overwhelmingly impress us with the appearance of design as if by a master watchmaker, impress us with the illusion of design and planning.

Darwinism critic, Philip Johnson, has quipped that the watchmaker is not only blind but unconscious!

Dawkins later suggests just how this process may have brought about the development of wings in mammals. He says:

> How did wings get their start? Many animals leap from bough to bough, and sometimes fall to the ground. Especially in a small animal, the whole body surface catches the air and assists the leap, or breaks the fall, by acting as a crude aerofoil. Any tendency to increase the ratio of surface area to weight would help, for example flaps of skin growing out in the angles of joints... (It) doesn’t matter how small and unwinglike the first wingflaps were. There must be some height, call it \( h \), such that an animal would just break its neck if it fell from that height. In this critical zone, any improvement in the body surface’s ability to catch the air and break the fall, however slight the improvement, can make the difference between life and death. Natural selection will then favor slight, prototype wingflaps. When these flaps have become the norm, the critical height \( h \) will become slightly greater. Now a slight further increase in the wingflaps will make the difference between life and death. And so on, until we have proper wings.

This can sound rather seductively convincing at first. However there are three faulty assumptions being used.

The first doubtful assumption is that nature can provide a whole chain of favorable mutations of the precise kind needed to change forelimbs into wings in a continuous line of development. What is the
larger miracle, an instantaneous change or a whole series of thousands of tiny changes in the proper sequence?

The other assumption is “all things being equal.” These mutations must not have secondary harmful effects. How is the creature’s grasping ability compromised while these wingflaps grow? These little shrew-like animals may slowly be caught between losing their adaptiveness in the trees before they can fully utilize their “developing” wings. Or there might be some seemingly unrelated and unforeseen effect that compromises survivability.

A third faulty assumption is the often used analogy to artificial selection. “If artificial selection can do so much in only a few years,” so the refrain goes, “just think what natural selection can do in millions of years.” But artificial selection works because it incorporates foresight and conscious purpose, the absence of which are the defining qualities of the blind watchmaker. In addition, artificial selection actually demonstrates the limits to change since an endpoint in the selection process is usually reached very quickly.

The blind watchmaker hypothesis, when analyzed carefully, falls into the category of fanciful stories that are entertaining—but which hold no resemblance to reality.

### The Prevalence of Stasis over Mutability

Rather than observing organisms gradually evolving into other forms, the fossil record speaks of “sudden appearance” and “stasis.” New types appear suddenly and change very little after their appearance. The rarity of gradual change examples in the fossil record were revealed as the trade secret of paleontology by Steven J. Gould of Harvard. Gould also refers to stasis as “data” in the paleontological sense. These are significant observations.

Darwin predicted that there should be innumerable transitional forms between species. But the reality of paleontology (the study of fossils) is that new forms appear suddenly with no hint of the “gradual” change predicted by evolution. Not only that, but once these new forms have appeared, they remain relatively unchanged until the present day or until they become extinct.

Some animals and plants have remained unchanged for literally hundreds of millions of years. These “living fossils” can be more embarrassing for the evolutionist than they often care to admit. One creature in particular, the coelacanth, is very instructive. The first live coelacanth was found off the coast of Madagascar in 1938. Coelacanths were thought to be extinct for 100 million years. But most evolutionists saw this discovery as a great opportunity to glimpse the workings of a tetrapod ancestor. Coelacanths resemble the proposed ancestors of amphibians. It was hoped that some clues could be derived from the modern coelacanth of just how a fish became preadapted for life on land, because not only was there a complete skeleton, but a full set of internal organs to boot. The results of the study were very disappointing. The modern coelacanth showed no evidence of internal organs preadapted for use in a terrestrial environment. The coelacanth is a fish—nothing more, nothing less. Its bony fins are used as exceptionally well-designed paddles for changing direction in deep-sea environment, not the proto-limbs of future amphibians.

Nowhere is the problem of sudden appearance better demonstrated than in the Burgess Shale found in the Canadian Rockies. The Burgess Shale illustrates that in the Cambrian period (which evolutionists estimate as being over 500 million years ago) nearly all of the basic body plans (phyla) of animals existing on earth came into existence in a geological instant (defined as only 20-30 million years), and nothing that new has appeared since that time. The Cambrian explosion as it is called is nothing less than astounding. Sponges, jellyfish, worms, arthropods, mollusks, echinoderms, and many other stranger-than-fiction creatures are all found to suddenly appear in the Cambrian without
a hint of what they descended from nor even how they could all be related to each other. This is the opposite expectation of Darwinism which would have predicted each new body plan emerging from pre-existing phyla over long periods of time. The Cambrian explosion is a direct contradiction of Darwinian evolution.

If Darwin were alive today, I believe he would be terribly disappointed. There is less evidence for his theory now than in his own day. The possibility of the human eye evolving may have caused him to shudder, but the organization of the simplest cell is infinitely more complex. Perhaps a nervous breakdown would be more appropriate!

Jerry Coyne’s Illusions

Dr. Ray Bohlin critiques evolutionary biologist Jerry Coyne’s materialistic claim that our brain is only a meat computer.

Jerry Coyne Says Science Proves We Make No Real Choices

Let’s see. This morning I chose my black t-shirt, tan dress slacks, black shoes, and black socks. After gathering all my things for the trip to the office, I put on my now-famous Grand Canyon felt hat and headed out the door, deciding I didn’t need an umbrella for the short walk in the rain.

Oops! Wait a minute! According to evolutionary biologist, Jerry Coyne, I made none of those choices. Now I did do all those things, but my brain determined those “choices.” After all, my brain is just a meat computer, destined to obey the laws of physics to combine my genetic history, past environmental cues, and my latest experiences to make those decisions. “I,” meaning me as a person apart from the meat computer, don’t exist! Enter with me into the wacky world of evolutionary naturalism where all there is, is matter and energy.

Dr. Jerry Coyne is a Professor at the University of Chicago in the Department of Ecology and Evolution. In many ways he has broken political ranks with many of those seeking to improve education in evolution by actively proclaiming that evolution entails atheism. He lines up with those like Richard Dawkins, Sam Harris, and the late Christopher Hitchens. Religion is the greatest evil on the planet, they decry, and we need to dispose ourselves of all religious nonsense such as freedom of
choice.

You see, our mental decisions are just chemical reactions in our brains which just happen. There is no purpose or even a choice in making our choices!

Now that I probably have you thoroughly confused, let me try to let Jerry Coyne speak for himself.

In January of last year, Coyne published a commentary in the online version of USA Today titled, "Why you don’t really have free will."{1} He stated, "You may feel like you’ve made choices, but in reality your decision to read this piece, and whether to have eggs or pancakes, was determined long before you were aware of it—perhaps even before you woke up today. And your ‘will’ had no part in that decision. So it is with all of our other choices: not one of them results from a free and conscious decision on our part. There is no freedom of choice, no free will.”

Despite Coyne’s blatant certainty, he only offers, using his phrase, two lines of evidence. Notice even Coyne refers to them as just lines of evidence. There’s no real fact or certainty.

**Coyne’s Ultra-naturalism “Predetermines” His Conclusions**

Let me allow Coyne to speak for himself as he explains his first line of evidence, a materialistic assumption. He says,

> We are biological creatures, collections of molecules that must obey the laws of physics. All the success of science rests on the regularity of those laws, which determine the behavior of every molecule in the universe. Those molecules, of course, also make up your brain — the organ that does the “choosing.” And the neurons and molecules in your brain are the product of both your genes and your environment, an environment including the other people we deal with. Memories, for example, are nothing more than structural and chemical changes in your brain cells. Everything that you think, say, or do, must come down to molecules and physics.

It may be true that science depends on the regularity of the laws of physics, but Coyne makes no defense of whether there is anything else to our minds other than chemistry. He assumes without saying so that the material brain is all there is to our mind.

In 2007 neuroscientist Mario Beauregard and journalist Denyse O’Leary published The Spiritual Brain.{2} Quoting from the dust jacket, Beauregard and O’Leary demonstrate that scientific materialism like Coyne’s “is at a loss to explain irrefutable accounts of mind over matter, of intuition, willpower, and leaps of faith, of the ‘placebo effect’ in medicine, of near death experiences on the operating table, and of psychic premonitions of loved ones in crisis.” For each of these phenomena, they provide numerous examples where people’s minds understood, observed, changed, or perceived physical realities they simply could not know about in a purely physical sense.

Jerry Coyne’s first line of evidence turns out to be an unverified materialist assumption that has plenty of physical evidence that cannot be explained on a materialist basis. So much for convincing evidence. But to his credit, Coyne proceeds to scientific evidence he says demonstrates that brain measurements indicate our “decisions” can be predicted by observing blood flow to certain areas of the brains seconds before we actually feel we have “decided.”
Does Our Brain “Decide” Before We’re Conscious of the Decision?

Coyne’s second line of evidence consists of brain experiments claiming to predict our decisions by observing blood flow in decision-making areas of our brain seconds before we are aware of our decision. Coyne says,

Recent experiments involving brain scans show that when a subject “decides” to push a button on the left or right side of a computer, the choice can be predicted by brain activity at least seven seconds before the subject is consciously aware of having made it. (These studies use crude imaging techniques based on blood flow, and I suspect that future understanding of the brain will allow us to predict many of our decisions far earlier than seven seconds in advance.) “Decisions” made like that aren’t conscious ones. And if our choices are unconscious, with some determined well before the moment we think we’ve made them, then we don’t have free will in any meaningful sense.”

This is certainly interesting research. My first reaction is to note that these are the simplest decisions we can make. Just choose left or right. No thinking involved, no consequences. What if the choice were far more substantial, such as “Should I buy this house based on my set of pros and cons of the decision?” Or what about those “split-second” decisions to avoid a collision in a vehicle or whether to stop or go when the traffic light unexpectedly turns yellow? Each of those decisions takes far less than seven seconds.

Granted, Coyne’s article is a simple commentary in an online newspaper, but I expect more solid and convincing evidence that this. Coyne leaves us with little else than his materialist assumptions as reviewed previously.

Coyne is Required to Pretend He Has Choice

I’d like to turn my attention to Coyne’s attempts to spell out our options, once we are convinced, as he is, that we really don’t make any choices.

Coyne dismisses various philosophical attempts to rescue some sort of free will. It’s clear Coyne is scornful of philosophy in general. Maybe that explains why he is such a bad philosopher. I say that because he continues by expressing that it’s impossible to just throw up our hands and despair that life is not worth living if I don’t really make choices. Coyne says:

So if we don’t have free will, what can we do? One possibility is to give in to a despairing nihilism and just stop doing anything. But that’s impossible, for our feeling of personal agency is so overwhelming that we have no choice but to pretend that we do choose, and get on with our lives. After all, everyone deals with the unpalatable fact of our mortality, and usually do so by ignoring it rather than ruminating obsessively about it.

Now that’s a mouthful. First, Coyne rejects despairing nihilism simply because we are bound by the laws of physics. That’s my understanding of his rationale that our “feeling” of personal agency is so overwhelming. But I hope you caught the absurdity of the following comment. Coyne says, “for our feeling of personal agency is so overwhelming that we have no choice but to pretend that we do choose.” Really? We have no choice (was the pun intended?) but to “pretend” that we do choose?
I have to say that when your worldview requires you to pretend that reality is something other than what you perceive, your worldview clearly can’t be trusted.

This reminds me of a class back in grad school when I asked about meaning and purpose in life in the evolutionary world view. They said that as just another animal, our only purpose is to survive and reproduce. I asked again, “What difference does it make, though, when I’m dead and in the ground?” According to evolution, my existence is over. One prof responded by saying that ultimately it doesn’t really matter. So I asked, “Then why go on living, why stop at red lights, who cares?” The same professor responded by saying, “Well, in the future, those that will be selected for will be those who know there is no purpose in life, but will live as if there is.”

So not only do we need to pretend that we choose but we also need to pretend that our lives have meaning. Doesn’t that make you want to get up in the morning?!

How Does Knowing Our Brain’s Illusions Lead to a “Kinder” World?

Towards the end of Coyne’s commentary he tries to discern what we should do with our understanding that we don’t have any free will. First, as you might suspect, he disparages religion, specifically Christianity. He concludes that, since we have no real choice, none of us can really choose Jesus or reject him. It’s all predetermined by our genetic and environmental history. So, “If we have no free choice, then such religious tenets—and the existence of a disembodied ‘soul’—are undermined, and any post-mortem fates of the faithful are determined, Calvinistically, by circumstances over which they have no control.” Well, there you have it, Reformed theology according to Jerry Coyne.

His second observation is that since we are little more than marionettes responding to the laws of physics, this should influence how we deal with criminals. We may decide for the sake of society that some need to be removed from circulation, so to speak — sent to prison for our protection. But we certainly can’t hold them responsible. According to Coyne, “What is not justified is revenge or retribution—the idea of punishing criminals for making the ‘wrong choice.’”

Well if all this is really true, then why is Jerry Coyne trying to convince us of anything? We have no real choice. Coyne is an atheist because he can’t help it. That would mean I’m a Christian because I can’t help it. So why is he trying to convince me I have made a “wrong choice”? Obviously the internal contradictions abound.

Lastly, Coyne says our knowledge of no free will or real choices should lead to a kinder world, presumably because revenge is outdated. “Further, by losing free will we gain empathy, for we realize that in the end all of us, whether Bernie Madoffs or Nelson Mandelas, are victims of circumstance—of the genes we’re bequeathed and the environments we encounter. With that under our belts, we can go about building a kinder world.”

Just one word: Huh?

Well, personally I have gained empathy for Jerry Coyne because his commentary is just a product of circumstance, so I can just ignore it.

Thanks for reading.

Notes

1. Jerry Coyne, “Why you don’t really have free will,” USA Today, Jan. 1, 2012, usat.ly/WBnUBi. All
Coyne’s quotations are from this commentary.

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