

“Your Critique of Sociobiology Makes No Sense”

Perhaps I have severely misunderstood your [critique on sociobiology](#), but as I interpreted it, it makes no sense. From the sociobiologist proposition that all human nature and behavior is shaped solely by evolutionary necessity (and what promotes reproduction and survival), it does not follow, as you have asserted, that any significant hope and meaning in life is precluded. I don't know what kind of a faculty member you were talking to, but the question you posed (“What difference does it make if I've reproduced once I'm dead?”) is an easy one to answer. The goal of humanity, as believed by sociobiologists, is to pass on its genetic legacy. No single organism is particularly important, but only the collaborative propagation of a species of its genes. Therefore, the difference of whether or not one has reproduced by the time of death is a crucial one. One who dies and leaves no offspring does not pass on any genetic legacy, and is truly, in an evolutionary sense, dead. Those who do leave offspring and die are able to, in an evolutionary sense, live on vicariously through the genes that they pass on to their young, and the genetic legacy continues.

In response to the philosopher's division of life purpose into 'small letters' (survival/reproduction) and 'capital letters' (ultimate meaning and significance, whatever that means), the sociobiological assertion is that survival and reproduction is the ultimate meaning and significance of life. I think one of your crucial errors is that you assume that knowledge of the cause and origins of human nature actually change the validity of human nature itself, and somehow make our ambitions less “lofty. Well, our nature is what it is and we do what we do. We love our children and spouses with all our hearts, and if we do so only for the sake of evolutionary efficacy, than so

be it, but our feelings do not therefore become false and invalid. We at times act selflessly and help others at the expense of ourselves. But if this behavior is ultimately 'genetically selfish,' ostensibly helping others while really benefiting ourselves, than so be it, but these feelings are nevertheless meaningful. A principal proposition of sociobiology is that we have motives to act of which we are not always consciously aware. That does not mean they do not exist, and if they do exist, then following them does not make our lives inherently worthless.

Perhaps the sociobiological argument is not particularly aesthetically pleasing (which I think is really your main objection), but this is not by any means grounds for a scientific rebuttal.

Sincerely and respectfully,

_____, Ph.D.

I believe you are the first to question my critique along these lines. I will attempt to answer your objections in the body of your initial message.

Perhaps I have severely misunderstood your critique on sociobiology, but as I interpreted it, it makes no sense. From the sociobiologist proposition that all human nature and behavior is shaped solely by evolutionary necessity (and what promotes reproduction and survival), it does not follow, as you have asserted, that any significant hope and meaning in life is precluded. I don't know what kind of a faculty member you were talking to,

He was the head of the department of ecology and evolution.

but the question you posed ("what difference does it make if I've reproduced once I'm dead?") is an easy one to answer.

To be clear, my question was "Once I am dead and in the ground

(implying that in a naturalistic worldview since there is no afterlife, my life is absolutely over), what difference does it make to me NOW?"

The goal of humanity, as believed by sociobiologists, is to pass on its genetic legacy. No single organism is particularly important,

Precisely why I made my question very personal.

but only the collaborative propagation of a species of its genes. Therefore, the difference of whether or not one has reproduced by the time of death is a crucial one.

Not to the species but to me, but I no longer exist.

One who dies and leaves no offspring does not pass on any genetic legacy, and is truly, in an evolutionary sense, dead.

So what? My genes are not me, they are just molecules. If, as E. O. Wilson summarized in *Sociobiology: The New Synthesis*, The organism is just DNA's way of making more DNA, then I don't really matter anyway. And once I am dead and no longer exist (organism), nothing makes any difference to me since I do not exist. That is why the professor said that "ultimately" it doesn't really matter. He got the gist of my question.

Those who do leave offspring and die are able to, in an evolutionary sense, live on vicariously through the genes that they pass on to their young, and the genetic legacy continues.

I don't live vicariously in my genes. They are now part of a new unique creature that combines my genes with a woman's genes in a new and totally unique combination. Even a clone would not be exactly "me" since mutations and recombinations would have occurred, erasing my genetic identity.

In response to the philosopher's division of life purpose into 'small letters' (survival/reproduction) and 'capital letters' (ultimate meaning and significance, whatever that means),

Some meaning for existence beyond the mere physical.

the sociobiological assertion is that survival and reproduction is the ultimate meaning and significance of life.

But as I state in the article, without some meaning for life that arises outside of ourselves, there is no meaning in small letters. If we are just molecules, then that's it! We are just molecules, nothing more can be said about us. How those molecules get arranged or persist or are annihilated is totally irrelevant to the ongoing history of the universe. Nothing cares and nothing therefore matters.

I think one of your crucial errors is that you assume that knowledge of the cause and origins of human nature actually change the validity of human nature itself, and somehow make our ambitions less "lofty."

How can this not be so? From Darwin to today, evolution is said to be without direction and without purpose and we are mere accidents of history. This is not a conclusion of evidence, but of philosophy. For many it is a specific attempt to remove any form of God from the equation of who we are and where we came from. Once that is done we are free to make our own rules. When Richard Dawkins writes that Darwin made it possible to be an intellectually fulfilled atheist, he means it, at least partially, for the purpose of the freedom from any kind of imposed morality. Dawkin's watchmaker is not only blind, but totally without sympathy to whatever outcome comes about through natural selection. Specifically as to whether I reproduce or not.

Well, our nature is what it is and we do what we do. We love our children and spouses with all our hearts, and if we do so only for the sake of evolutionary efficacy, than so be it, but our feelings do not therefore become false and invalid.

Certainly it becomes false and invalid, because I am only being manipulated by my genes which have been formed by thousands of generations. I am not really choosing, just reacting according the program established by natural selection.

We at times act selflessly and help others at the expense of ourselves. But if this behavior is ultimately 'genetically selfish,' ostensibly helping others while really benefiting ourselves, than so be it, but these feelings are nevertheless meaningful.

How can they be "meaningful" if they are ultimately selfish and not altruistic at all? That's why Trivers adds the word "reciprocal" in front of the word because simple altruism no longer exists in a sociobiological world.

A principal proposition of sociobiology is that we have motives to act of which we are not always consciously aware. That does not mean they do not exist, and if they do exist, then following them does not make our lives inherently worthless.

Certainly they exist, but their source is crucially important. If I pull the string on a Chatty Cathy doll and she says, "I love you," does she really love me? Of course not. But we are no different according to sociobiology. We are both complex arrangements of molecules uttering responses based on an internal program conditioned to respond to outside stimuli (pulling a string or gazing at our newborn's cute and cuddly face).

Perhaps the sociobiological argument is not particularly aesthetically pleasing (which I think is really your main objection), but this is not by any means grounds for a scientific rebuttal.

Indeed, it is not aesthetically pleasing, but sometimes truth is hard to take, agreed. But that is not my problem. There is no purpose beyond survival and reproduction which is merely an illusion perpetrated on us by our brains which has been constructed by natural selection to simply aid survival and reproduction, not to recognize truth. And our entire body doesn't really matter, just our genes which are simply reproducing themselves because that's just what DNA does. But DNA is just a mindless molecule with no purpose or goal or direction. How then can we have any?

Respectfully,

Ray Bohlin, Ph.D.
Probe Ministries

The Controversy over Evolution in Biology Textbooks

Texas, Textbooks and Evolution

Public school textbooks are big business in Texas. Texas is the second largest purchaser of textbooks behind California. Texas also employs an extensive review process which involves input from the public. Independent school districts in the

state of Texas can purchase whatever textbooks they prefer. But if they want state assistance in the purchase of textbooks, they'd better pick those texts that are recommended by the State Board of Education.

Publishers know that whatever books Texas approves, other states will adopt as well. Therefore the decisions by the Texas State Board of Education regarding textbooks influence what many students across the country will be reading over the next few years. Publishers pay very close attention to what goes on in Texas.

Evolution has been a contentious issue before the State Board for decades. A few years ago, they passed a resolution that said textbooks were to be free from factual errors and that the information in the texts should allow students to "analyze, review, and critique scientific explanations, including scientific hypotheses and theories, as to their strengths and weaknesses using scientific evidence and information."

This certainly sounds scientific and fair. I mean, who doesn't want both sides of scientific controversies presented? Any "scientist to be" needs to be able to analyze, review, and critique scientific explanations. Scientists rarely want to just take someone's word for something. Scientists tend to be skeptical in nature. That's a good thing. Students ought to be encouraged and trained to think this way.

That is, they ought to be trained to think this way about everything in science, except evolution. Evolution has become the unassailable myth of modern science. No dissension allowed. No controversies accepted. No challenges tolerated. Evolution is a fact and anybody who doesn't think so is ignorant, dishonest, or religiously motivated.

But for some reason, skepticism about evolution and Darwinian evolution in particular just won't go away. The dissenters are

also growing in number and levels of education. So when the Texas State Board of Education announced its two public hearings in the summer of 2003, the battle lines were clearly drawn. Skeptics of Darwinism came loaded with careful examinations of the textbooks up for adoption, pointing out inaccuracies, falsehoods, and skimmed-over controversies. No one came to include creation or intelligent design into the textbooks.

Defenders of evolution came loaded with little else besides crude attempts to discredit their critics and scary words of warning about attempts to get religion into the science textbooks.

What's Wrong with the Textbooks As They Are?

If you have occasion to pick up a high school biology textbook, you quickly realize that the process of writing it must be a daunting task. The amount of detailed information they contain today over a wide range of biological phenomena is truly staggering.

The reality that they contain errors or out of date material can be easily understood. You would think that authors and publishers would welcome those who spot these problem areas and take the time and effort to point them out. For the most part this is indeed the case. Except when the errors concern the presentation of evolutionary theory. Pointing out factual errors, exaggerated claims or poor logic in the presentation of evolution suddenly becomes suspect. One's motives should be questioned. Evolution is a fact, after all, and surely no one thinks that evolution as presented in textbooks should be altered in any way.

I'm being facetious, of course. Evolution should be open to scrutiny as much as any other area of biology, but it isn't. Some mistakes in biology textbooks have persisted for decades,

despite efforts to point them out and seek their removal or correction.

A classic example involves the Miller-Urey experiment. In 1953, Harold Urey and Stanley Miller published the results of an experiment that was meant to simulate the production of biochemicals necessary for life from gasses that were thought to be in earth's early atmosphere. Among a host of meaningless organic compounds, Miller and Urey found a few amino acids, the building blocks of proteins.

The experiment caused quite a sensation and launched the origin of life field with a bang. Over the years, however, numerous problems showed up that invalidated the experiment. Chief among these problems was the determination that the atmosphere they used—ammonia, methane, water vapor, and hydrogen gasses—did not represent the early atmosphere. These hydrogen rich gasses were replaced with carbon dioxide, carbon monoxide, nitrogen, and water vapor. When these gasses are used, the experiment is a dismal failure. Trace amounts of the simplest amino acid, glycine, sometimes appears, but not enough to get excited about.

All this has been known since the late 70s. But over thirty years later, textbooks represent the Miller/Urey experiment as if it still represents a realistic simulation. Why? Because it's the only experiment that works. And there needs to be a naturalistic story of where life could have come from.

Other problems remain in the infamous and fraudulent embryo drawings of Ernst Haeckel, the newly discovered problems with the peppered moth story, the startling evolutionary problem of the Cambrian explosion, and many others. Some of evolutionists' most cherished examples of evolutionary principles have fallen on hard times.

A Public Hearing in Texas in July 2003

The Texas State Board of Education is a powerful group of people. Every six years they evaluate textbooks for use in the Texas public schools, and many private schools and public schools from other states follow their lead. Part of the reason for this is the extensive review process the board employs.

Not only do the fifteen elected Board members review the texts, but a committee of educators from the Texas Education Agency also reviews them, and the public is invited to state its opinions as well. The Board reviews textbooks every year but they cycle through several categories every six years. The year 2003 was the year for biology textbooks.

I attended the first public hearing on July 9th in Austin, Texas. Citizens of Texas who wish to testify need to sign up about two weeks prior to the hearing. Each testifier is allotted three minutes, which is closely timed, and then a few board members may ask a few questions.

Three minutes isn't very long. It's about the length of one of our daily radio programs. So whatever you need to say, you'd better say it concisely and quickly. I briefly presented my scientific credentials and addressed problems with the Miller-Urey experiment, the Cambrian explosion, and the mutation/natural selection mechanism of evolution.

I kept my remarks strictly along factual lines and discussed the evidence, with no mention of a Creator or Intelligent Design. But before the meeting even started I knew I was in for a long afternoon. At noon, one hour before the meeting, a group from The National Center for Science Education (NCSE) gave a press conference warning the media to expect another attempt from pseudo-scientists to try to include creationism into the textbooks.

Actually of the forty or so people signed-up to testify, only three of us were there to criticize evolution and no one was there to argue for creation. In the minutes before the meeting there was suddenly a horde of media looking for me and asking for interviews. Thanks to the NCSE I was provided with opportunities for nearly a dozen interviews, mostly TV. I was able to explain our side of the story and correct the NCSE's distorted paranoia.

The defenders of evolution came to say that evolution ought to be left alone: don't cave in to the pressure! But who was exerting the pressure? There were only three of us and over thirty of them. We came with scientific criticisms. They offered little else besides blatant misrepresentations and character assassinations.^{1} These testimonies primarily set the stage for the September hearing.

A Second Public Hearing in September 2003

A major player in the entire hearing process was the Discovery Institute (www.discovery.org), a public policy institute out of Seattle, Washington. Discovery sponsors a Center for Science and Culture that provides limited funding for skeptics of Darwinism and proponents of Intelligent Design. I have received two limited fellowships from Discovery to help write a new edition of my book with Lane Lester, *The Natural Limits to Biological Change*. It was Discovery that contacted me about possibly testifying at the July 9th hearing.

Because of the intense media coverage of that hearing, the folks at Discovery spent a great deal of time addressing the media, correcting their errors and explaining the real story. As the September 10th hearing approached, Discovery sent out press releases and sent a team to Texas to hold press conferences and potentially testify before the State Board of Education.

Because of all the media attention, that ranks of testifiers

swelled to unmanageable portions. Over 150 people signed up to testify and they all expected their three minutes. You do the math! This was going to be a long meeting. Most of those associated with the Discovery Institute and a Texas-based organization, Texans for Better Science Education (www.strengthsandweaknesses.org), gained the early testimony slots when the board members were most alert. The meeting dragged on until 1 a.m., a full twelve hours.

Once again, those of us criticizing the textbooks came prepared with specific criticisms of the textbooks and the other side simply wanted to say that we had no place at the table of discussion and should be ignored because we are pseudo-scientists and religious fundamentalists.

Most distressing of all was a pastor from a large Southern Baptist Church in Austin who came to tell the Board that evolution was of science and creation was of Genesis and faith and that the two had nothing to do with each other. He went on to add that he and everyone else knew that the dissenters from evolution were only there to protect their religious beliefs. He received a thunderous round of applause from the theistic evolutionists, agnostics and a theists in the crowd.

How sad that this brother in Christ was so deceived and even pretended to know why I was really there, having never spoken to me, nor had we even ever met. This broke my heart, as did other pastors who came to help but only showed their lack of knowledge about evolution and ended up hurting more than they helped.

While many evolutionists embarrassed themselves by exhibiting a childish paranoia, so did many Christians who just really didn't understand the issues. I'd love to do a Probe Ministries [Mind Games Conference](#) in all these churches—they need it.

Was Anything Accomplished?

There was heavy media interest from July through early November when the Texas State Board of Education made their final decision. Special interests from both evolutionists and those dissenting from evolution were involved.

Those who wanted to strictly follow Texas guidelines to teach evolution, but remove factual errors and include both strengths and weaknesses of evolution hoped to vote on each textbook individually. But the more liberal majority decided to vote on adopting the Texas Education Agency's recommendation to approve all eleven textbooks. This motion passed by a vote of 11-4. Only two textbooks had made sufficient changes to be judged "conforming."^{2} The other nine would have been judged "non-conforming," which would have still made them eligible to be purchased with state funds. Only a book judged "rejected" would not be purchased by the state.

This was a small setback. But some significant changes were made. The fraudulent Haeckel drawings of vertebrate embryos, suggesting far more evidence for evolution than actually exists, have been virtually removed entirely. The fraud has been known for over 100 years. Two textbooks (Holt and Glencoe) have now inserted acknowledgments that the Miller-Urey origin of life experiment was based on ideas about the earth's early atmosphere no longer accepted by scientists. Another textbook has qualified an earlier claim made about evolutionary intermediates. The original textbook claimed that "since Darwin's time, many of these intermediates have been found." The revised text now reads: "Since Darwin's time, some of these intermediates have been found, while others have not."^{3}

The journal *Science* matter-of-factly reported, "In response, some textbook publishers made minor changes, including replacing embryo drawings with photos and dropping the term

'gill slits.' One also eliminated the assertion that Darwin's theory is the 'essence of biology.'" {4}

While many of these changes are small, the public perception of the debate seems to be changing as evidenced by this statement from a *Dallas Morning News* editorial from November 5th:

"This ought to be easy; science is supposed to deal solely in facts. But the teaching of evolution is so entangled with politics that warring factions can't even agree on the facts. (What did the flawed Miller-Urey "origin of life" experiment prove, if anything, for example?) This is an injustice to the people of the state, who have a right to expect their children's biology textbooks to be a straightforward presentation of the most up-to-date scientific information, facts not privileged from a religious or anti-religious perspective."

Other errors and problems still remain. {5} But this has been a good start.

Notes

1. Sample testifier statements:

- *Steven Schafersman, President of Texas Citizens for Science: "I am aware that the Discovery Institute, a creationist organization out of Seattle, Washington, has become involved in the Texas education process just as they did recently in Kansas and Ohio. They have prepared written testimony about the books submitted here and apparently deputized a member of a Texas creationist organization, Probe Ministries, to speak on their behalf." (Hey, that's me!)*

- *Ms. Amanda Walker: "So what we are really doing here is talking about using the political process to override the science process to suit creationists whose theories can't stand up in the global scientific community"*
- *Dr. David Hillis, Professor of Biology, UT Austin: "The objections to evolution in textbooks that you have heard are not about science or facts. They are about pushing a religious and political agenda."*
- *Ms. Kelly Wagner: "If you consider at all adding intelligent design to any of these textbooks, I would like you, again, this is a very, very personal question. I would like you to think, am I furthering medical research? Or am I contributing to Kelly Wagner's early death?" Ms. Wagner felt that "weakening" evolution in the high school biology textbooks would compromise medical research and therefore that research on her heart condition could be compromised.*

2. Most likely these would have been the Holt Biology book and the Glencoe Biology book, both of which made numerous constructive changes.

3. Holt Biology, p. 283

4. Constance Holden, "Texas resolves war over biology texts," *Science* Vol. 302(Nov.14, 2003):1130.

5. Use this website from Discovery for full report on the Texas debate. <http://www.discovery.org/csc/texas/>.

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The Galapagos Islands: The Bohlins' Visit



The Galapagos Islands, off the coast of Ecuador, are where Charles Darwin received the inspiration for the theory of evolution. In observing the islands' ecosystem and how its bird and reptile inhabitants compared to similar South American cousins, Darwin assembled what has become the driving philosophy of science.

In May 2003, Dr. Ray and Sue Bohlin visited the Galapagos Islands with a different perspective, focusing on intelligent design and the natural limits to biological change. Here is their report.

[1 – Why Visit the Galapagos Islands?](#)

[2 – Thursday PM: Bartolome](#)

[3 – Friday AM: Punta Espinosa](#)

[4 – Friday PM: Tagus Cove](#)

[5 – Saturday AM: Punta Moreno](#)

[6 – Saturday PM: Urbina Bay](#)

[7 – Sunday AM: Darwin Research Station](#)

[8 – Sunday PM: Santa Cruz Highlands](#)

[9 – Monday AM: Beach Visit](#)

[10 – Galapagos Wrap Up: ICR Lecture, What It All Means](#)

The Galapagos Islands: Evolution's Sacred Ground

Dr. Bohlin helps us understand the significance of the Galapagos Islands in the birth of the evolutionary theory of Charles Darwin. Based on personal observation on these unique isolated islands, he explains why he is not convinced that the animals of these islands make a case for the evolution of all living things.

What's So Important About the Galapagos Islands?

The Galapagos Islands are located in the Pacific Ocean, 650 miles off the coast of Ecuador in South America. They are isolated from any other island group or land form.

What's so important about the Galapagos Islands? Here are four reasons:

First, because they are extremely isolated, the Galapagos Islands are home for dozens of species of both plants and animals found nowhere else in the world. The Galapagos Tortoise, for example, is the largest reptile found anywhere on the planet, and it lives longer than any animal known to man. The oldest is currently over 170 years old and lives in a zoo in Australia. Other unique animals include the Flightless Cormorant, the Marine Iguana, the Galapagos Penguin, and Darwin's Finches.

There are even unique forms of plants including numerous forms of cacti and at least thirteen species of sunflower or daisy-like plants, one of which is a "sunflower" tree with bark and no tree rings.

Second, Darwin's visit to the Galapagos for five weeks in 1835

on the HMS Beagle provided the starting point for the development of his theory of natural selection. Darwin had believed that God individually created each species. However, when he saw and studied variations between similar species from island to island, he correctly reasoned that a natural process made more sense. However, he eventually threw the baby out with the bathwater by reasoning that all species arose by a natural process through natural selection. Darwin's Finches continue to be used as a textbook example of evolution today.

Third, similar to the Hawaiian Islands, the Galapagos Islands are volcanic. There is a geological hotspot deep in the earth's crust underneath the Pacific tectonic plate where magma flows to the surface. The hotspot remains stationary. However, as the Pacific plate moves from west to east, new volcanic islands begin to appear beneath the sea until they eventually poke above the surface to create a new Galapagos island. The youngest of the islands is the island of Fernandina which is the westernmost island. It is estimated geologically to be 800,000 years old. The oldest islands off to the east are estimated to be 3 million years old.

Fourth, two major ocean currents affect the climate of the Galapagos. First, from the south comes the Humboldt Current from Antarctica. Second, a deep-water current comes from the west. Upon reaching the islands, this cold deep water current brings with it a large supply of nutrients that feed the bottom of the food chain. Consequently the western waters of the Galapagos are colder and richer in marine life. These cold-water currents keep the temperature of the islands rather moderate for islands on the equator. In the Galapagos, the waters usually range from the 60s to the 70s F (15-22 degrees Centigrade), creating a more temperate climate for these equatorial islands.

All these factors combine for a most unique experience. The Galapagos have been a "poster child" for evolution ever since Darwin. We'll see how well that holds up.

What Evidence of Evolution Do Darwin's Finches Provide?



[Click to see Ray's picture report of his trip to the Galapagos Islands](#)

In May 2003 I had my first opportunity to visit the Galapagos Islands with a group led by several scientists from the Institute of Creation Research. Our goal was simply to see for ourselves many of the unusual animals and plants which so heavily influenced Darwin in the development of his theory of natural selection.

Look in almost any high school biology textbook and you will find some mention, if not a whole section, on what are now known as *Darwin's finches*. Darwin's finches are comprised of thirteen different species of small finches that arose from a single species that colonized the islands. The finches have adapted to differing food sources ranging from different size seeds, to insects, to cactus flowers, to even blood. The major feature of these finches that has changed is the size and shape of their beaks, but the differences are very subtle.

When we got our first glimpse of the finches we found out just how subtle the differences in beak size and shape really are. Without being able to compare two or three birds right next to each other, we found it virtually impossible to identify them. This observation confirms recent research by Princeton researchers Peter and Rosemary Grant. The Grants have come to the Galapagos Islands every year since the mid-1970s. They have banded, measured, and weighed literally thousands of

finches of nearly all species.

Of the thirteen species, six are called ground finches, and they feed on different size seeds and cactus flowers. These finches particularly differ almost exclusively in their beak size or shape. The Grants have found that these finches will “evolve” to larger and smaller beaks depending on the seed availability based on a wet or dry rainy season.

They also learned that most of these six ground finches will interbreed, and the hybrids are fertile, meaning they can also breed among themselves. This information is quite startling because it means that these six species may actually be one species. And the actual degree of change is quite miniscule. The average beak size may change by only a half a millimeter from dry to wet season. These six finches are also indistinguishable in their mtDNA.

These species are so similar in the field that some of the workers and guides from the Darwin Research Station on the Galapagos have a saying: “Only God and Peter Grant can identify Darwin’s finches.”

As an icon of evolution, the finches are far less than hoped for.[\[1\]](#) Yes, they do document the reality of natural selection. But the degree of selection is quite small and seemingly insignificant. They are a wonderful example of the ability God has given His creatures to be fruitful and multiply in a fallen world.

Why Save the Galapagos Tortoise?

The word Galapagos is Spanish for *saddle*. The islands were named for a particular variety of Galapagos tortoise known as the saddleback. These tortoises inhabit the drier islands and feed primarily on many varieties of prickly pear cactus. The saddle refers to a striking feature of their shell that forms a large space just above the neck that allows the tortoise to

reach high to grab a succulent piece of cactus.

Since the islands were named for the saddleback tortoise they are a symbol of the islands. As I mentioned earlier, these tortoises are the largest living reptiles. They are also the longest living animals in the world. There is a female Galapagos tortoise in a zoo in Australia by the name of Harriet. Harriet was reportedly taken from the Galapagos Islands by Charles Darwin himself. She eventually was taken to Australia and is reported to be 173 years old, born around 1830. This would make her the oldest living creature on earth.

Harriet is a dome tortoise as opposed to the saddleback variety. Dome tortoises eat low-lying grasses, vegetation and fruits. When Darwin came to the Galapagos Islands in 1835, there were approximately 300,000 tortoises on eleven islands. There are five different varieties on the largest island, Isabella. The five varieties are found associated with the five large volcanic craters where water accumulates and grass is abundant. The other ten varieties inhabited a specific island, one variety of tortoise per island.

The islands were a favorite stopping place for whaling ships and ships crossing the Pacific. Sailors would come on shore and round up twenty to thirty tortoises to be used as food on the long voyage. A tortoise could remain alive with little or no food or water for months, providing fresh meat for the long voyage.

In addition, as people began colonizing the islands, they brought with them rats and mice that would eat the tortoise eggs. Introduced goats and pigs competed with the tortoises for food. Consequently, the tortoise population has been reduced to around 20,000. Some of the specific island varieties have gone extinct. Lonesome George has become the symbol of the plight of the giant tortoise. He is the only remaining member of the tortoises from Pinta Island, and he seems to be refusing to breed.

The Darwin Research Station on Santa Cruz Island in the Galapagos is involved in an extensive captive breeding program, trying to reestablish the tortoises in areas where they have disappeared. But why? If evolution is true, then let natural selection take its course. If they survive, fine. If not, that's just life in an evolutionary world. In Genesis, however, we are commanded to have rule and dominion over God's creatures. Wherever practicable, we have a biblical mandate to preserve the creatures He has made in the environment He provided for them (Psalm 104). So the Darwin Research Station is unwittingly acting on a Biblical worldview.

Strange Creatures of the Galapagos

Though the Galapagos Islands are world famous, they didn't particularly impress Darwin when he first arrived. In his book, *Voyage of the Beagle*, he wrote, "Nothing could be less inviting than the first appearance. A broken field of basaltic lava, thrown into the most rugged waves, and crossed by great fissures, is everywhere covered by stunted, sunburnt brushwood, which shows little signs of life." [\[2\]](#)

Though we may disagree with Darwin on many of the conclusions he drew from his observations of the Galapagos wildlife, he was nonetheless an excellent observer and rather humorous reporter. For instance, one of the well-known inhabitants of the Galapagos is the marine iguana, the only lizard in the world to feed in the sea. Darwin described it this way,

"It is extremely common on all the islands throughout the group, and lives exclusively on the rocky sea-beaches, being never found, at least I never saw one, even ten yards from shore. It is a hideous-looking creature, of a dirty black colour, stupid, and sluggish in its movements." [\[3\]](#)

Darwin aside, these creatures are fascinating. They feed on algae and seaweed close in to shore. They swim easily with a

serpentine movement with their limbs tucked close to their body. Since the water is so cool, they need several hours to sun themselves before entering the water for breakfast. They will only stay in the sea for about twenty minutes and never longer than an hour. When warming themselves, they lie perpendicular to the sun so their body is fully exposed to the sun. When maintaining their temperature they will face the sun directly and lift their chests off the ground to allow the sea breeze to provide ventilation.

The marine iguana's cousin, the land iguana eats cactus pads and leafy vegetation and never ventures toward the sea. They also didn't impress Darwin terribly much. He described them this way.

"We will now turn to the terrestrial species, . . . Like their brothers the sea-kind, they are ugly animals, of a yellowish orange beneath, and of a brownish red colour above: from their low facial angle they have a singularly stupid appearance. . . . In their movements they are lazy and half-torpid."[{4}](#)

Evolutionists suggest that these two species derived from a common ancestor over ten to twenty million years ago (although the oldest island is only 3 million years old!). But we learned that these two species would interbreed on occasion. The hybrids live for only seven to eight of the usual forty years, and their eating habits are strangely intermediate. The hybrids will eat cactus but not leafy vegetation, and will eat seaweed and algae but only at low tide when they can scramble over the rocks to get it. They won't enter the water. This level of hybridization makes it unlikely they are as old as evolutionists suggest.

Evidence for Evolution on the Galapagos

Islands?

Thus far we have reviewed some of the amazing animals and plants found on the Galapagos Islands in the Pacific Ocean. The mockingbirds, tortoises, and finches played a role in the formulation of Darwin's theory of natural selection. The Galapagos Islands and their varied and diverse wildlife continue to serve as examples of evolutionary change.

In my brief five-day visit to the Islands, I made a number of observations that cast doubt on the evolutionary significance of these islands.

Earlier this week we talked about Darwin's finches. These thirteen finches most likely are descended from a flock of more than thirty finches that colonized the islands about 2 million years ago according to evolutionists. They vary considerably in their beak size and shape as they have adapted to different food sources. As much as these finches have been studied, there is still a great deal we don't know.

For instance, we know nothing of the genetics of beak size and shape. It's certain that beak size is a heritable trait, but just what the genetic cause of the variation is, we don't know. As we said earlier, there may be as few as six actual species of finches on the islands, not thirteen. The changes in beak size and shape may simply have been due to genetic variation the original flock carried with them to the islands in the first place.

The changes between species are very small as we found out trying to identify them. The selection that has been documented varies only from dry to wet years and no overall trend has been observed. So Darwin's finches are not much of an example of evolution after all.

Another strange creature on the Galapagos Islands is the flightless cormorant. Cormorants are birds that inhabit the

shores of lakes, rivers, and oceans. They usually feed by diving into the water for fish. Cormorants will then perch above the waters surface and dry their feathers by holding their wings out for maximum air exposure. Flying requires dry wings.

The flightless cormorants of the Galapagos have wings so reduced that they are unable to fly at all. They catch fish by swimming in the water much as a penguin does using their large powerful feet for propulsion. The reduced wing size is probably due to a single mutation that short-circuits wing development in the cormorant chick. The change is indeed quite dramatic, but the change involves a loss of a feature, not the gain of a new adaptation. This is often the case in the origin of new adaptations. Something is lost, not gained. Evolution must be able to explain the gain of new features, not simply explain how an organism managed to survive when it lost an important structure. So even the dramatic case of the flightless cormorant is not real evidence for evolution.

The Galapagos are a naturalist's wonderland. They guard their mysteries in a shroud of isolation and time. They are a good example of the fact that there is much to learn about the world God created.

Notes

1. Jonathan Wells, *Icons of Evolution* (Washington, DC: Regnery Publishing 2000), p. 159-175.
2. Charles Darwin, *The Voyage of the Beagle*, Harvard Classics (Cambridge: Harvard University Press), p. 377-378.
3. Ibid, p. 390.
4. Ibid, p. 392.

“How Do Christians Respond to the Fact of Evolution?”

After reading one of your articles on Creation vs. Evolution I understood every aspect of their respective arguments, I was just a little confused as far as Christian responses to the arguments. Do Christians acknowledge evolution but then just say that God has pre-ordained this evolution to happen? Or do Christians just ignore the fact that evolution exists? Maybe I am making this too complicated. If Christians can see that an organism changes over time to adapt with the environment for absolutely no apparent reason, does this mean that they acknowledge this change happened for no apparent reason thus evolution, or just that God made this change possible?

Christians respond differently to the questions you propose. Some Christians, indeed, suggest that God ordained the evolutionary process as His means to create. These usually refer to their position as *theistic evolution* or *evolutionary creation*. As far as I know, no Christian ignores that “evolution” happens. All recognize microevolution as a real process in response to environmental change. This does not require mutation or the establishment of new genetic or morphologic systems. Change over time is only one form of evolution, which no one objects to. What we believe there is insufficient evidence for, is the notion that all life forms today are descended from a single original life form that itself evolved from purely chemical precursors around 4 billion years ago.

I hope this helps.

Respectfully,

Are We Alone in the Universe? A Biblical View of Aliens

Dr. Ray Bohlin provides a Christian view on the probability and meaning of life on other planets. From a biblical perspective, what would it mean to find evidence of life beyond this earth?



This article is also available in [Spanish](#).

Life on Mars?

There was great excitement in the media when a group of scientists from NASA announced they had found evidence of life on Mars. Their evidence, an alleged Martian meteorite, was vaulted to center stage, and everyone from CNN to *Nightline* ran special programs with interviews and video footage of the scientists and their prized specimen. President Clinton was so excited by the announcement that he praised the U.S. space program and took the opportunity to establish a bipartisan space summit headed up by Vice President Al Gore to study the future of U.S. space research. Aren't we already doing that?

Anyway, clearly this announcement took the country by storm. Some of the scientists were embarrassingly gushing about how significant these findings were. The media frenzy was prompted by the early release of an article from the journal *Science*, the premier scientific journal in the U.S. The article was due out the following week, but *Science* decided to release it early because it had leaked out.

Here's what the excitement was about. A group of scientists had studied a meteorite that had been found in the ice of Antarctica. Previously, it had been determined that this meteorite had originated on Mars by studying the gaseous content of glass-like components of the meteor. The gas composition matched very well the atmosphere of Mars. This conclusion seems reasonable.

So, they presumed they had a meteor from Mars. Next they looked for evidence of life on and in the crevices of the meteor. They found two types of molecules that can form as a result of life processes, carbonates and complex molecules called polycyclic aromatic hydrocarbons or PAHs. They also found shapes in the rock that resembled those of known microfossils on Earth. Microfossils are fossils of one-celled organisms which are rather tricky to interpret.

Well, what does this mean? Obviously, the NASA scientists felt the things just mentioned provided ample evidence to conclude that life once existed on Mars. However, the chemical signs could all be due to processes that have nothing to do with life, and the supposed microfossils are 100 times smaller than any such fossil found on Earth. Other groups that studied this same meteorite concluded that either the temperature of formation of the chemicals was far too high to allow life (over 700 degrees C) or that other chemical signals for life were absent. John Kerridge, a planetary scientist from the University of California at San Diego, said, "The conclusion is at best premature and more probably wrong." But listen to the concluding statement in the paper in *Science*:

Although there are alternative explanations for each of these phenomena taken individually, when they are considered collectively, particularly in view of their spatial association, we conclude that they are evidence for primitive life on Mars.[{1}](#)

In plain English, there are reasonable non-life explanations for each of the evidences presented, but we just think that they mean there is life on Mars. The evidence *is* very equivocal and was challenged by many other scientists, but the media did not report that as fully. But maybe they are right! In fact, there is one simple explanation that is consistently ignored by media and scientists alike. If there really is, or has been, life on Mars, what could that possibly mean for evolution, and more importantly, does it somehow refute creation? We'll look at that next.

What Would Life on Mars Mean?

Because of the recent announcement of signs of life on Mars, many people were encouraged in their belief that we are not alone in the universe. These signs are far from certain and probably wrong, but if it's true, what would these results mean to evolutionists? Moreover, is there any reason for Christians to fear confirmation of life on Mars?

Let us assume, then, for the moment that the evidence from this Martian meteorite is legitimate evidence for life on Mars—life that at some point in the past actually existed on Mars. What would it mean?

For evolutionists the evidence is perceived as confirmation that life actually arises from non-life by purely chemical processes. In addition, evolutionists draw the conclusion that life must be able to evolve very easily since it did so on two adjacent planets in the same solar system. Therefore, even though origin of life research is actually at a standstill, such a discovery seemingly confirms the notion that *some* chemical evolution scenario *must work*. I will address this assumption later.

On the other hand, some have stated that if there is life on Mars, creationism has been dealt a death blow. They rationalize that since (1) we now know that life can evolve

just about anywhere, and (2) the Bible never speaks of life anywhere but on Earth, the Bible is, therefore, unreliable. Besides, they reason, why would God create life on a planet with no humans? However, since the Bible is absolutely silent on the subject of extra-terrestrial life, we can make no predictions about its possibility. God is certainly free to create life on planets other than Earth if He chooses.

Getting back to the evolutionists' glee at the possibility of life evolving on other planets, the real question is whether this is the proper conclusion if life is indeed found on Mars? The simple answer, inexplicably avoided by the media, is NO! The simplest answer to the possible discovery of life on Mars is that the so-called "Martian life" actually came from Earth!

Think about it this way. The meteorite that was found is supposed to have existed on Mars previously. How did it get to Earth? Well, it is hypothesized that a large meteorite crashed into Mars throwing up lots of debris into space, some of which finds its way to Earth and at least a few of which are found by Earthlings. If you are thinking with me, you now realize that the same scenario could have been played out on Earth.

Evolutionists suggest that the Earth was under heavy meteor bombardment until at least 3.8 billion years ago—about the time they say life appeared on Earth. Christian astronomer Hugh Ross states it this way:

Meteorites large enough to make a crater greater than 60 miles across will cause Earth rocks to escape Earth's gravity. Out of 1,000 such rocks ejected, 291 strike Venus, 20 go to Mercury, 17 hit Mars, 14 make it to Jupiter, and 1 goes all the way to Saturn. Traveling the distance with these rocks will be many varieties of Earth life.[{2}](#)

Ross also documents that many forms of microscopic life are quite capable of surviving such a journey. All this is quite well known in the scientific community, but I have not seen it

mentioned once in any public discussion. I believe the reason is that the possibility of life having evolved on Mars is too juicy to pass up.

The Improbability of Life Elsewhere in the Universe

I would like to address the amazing optimism of so many that the universe is teeming with life. No doubt this is fueled by the tremendous success of such science fiction works as *Star Wars* and *Star Trek* which eloquently present the reasonableness of a universe pregnant with intelligent life forms.

Inherent within this optimism is the evolutionary assumption that if life evolved here, certainly we should not arrogantly suppose that life could not have evolved elsewhere in the universe. And if life in general exists in the universe, then, of course, there must be intelligent life out there as well.

This is the basic assumption of the SETI program, the Search for Extra-Terrestrial Intelligence. This is the program, now privately funded instead of federally funded, that searches space for radio waves emanating from another planet that would indicate the presence of intelligent life. But is such a hope realistic? Is there a justifiable reason for suspecting that planets suitable to life exist elsewhere in the universe?

Over the last two decades scientists have begun tabulating many characteristics of our universe, galaxy, solar system, and planet that appear to have been finely-tuned for life to exist. Christian astronomer and apologist, Dr. Hugh Ross documents all these characteristics in his book *Creator and the Cosmos*, [\[3\]](#) and is constantly updating them. In the book's third edition (2001), Ross documents 35 characteristics of the universe and 66 characteristics of our galaxy, solar system, and planet that are finely-tuned for life to exist.

Some examples include the size, temperature, and brightness of

our sun, the size, chemical composition, and stable orbit of Earth. The fact that we have one moon and not none or two or three. The distance of the Earth from the sun, the tilt of the earth's axis, the speed of the earth's rotation, the time it takes Earth to orbit the sun. If any of these factors were different by even a few percent, the ability of Earth to sustain life would be severely compromised. Recently it has been noted that even the presence of Jupiter and Saturn serve to stabilize the orbit of Earth. Without these two large planets present exactly where they are, the Earth would be knocked out of its present near circular orbit into an elliptical one causing higher temperature differences between seasons and subjecting Earth to greater meteor interference. Neither condition is hospitable to the continuing presence of life.

Ross has further calculated the probabilities of all these factors coming together by natural processes alone to be 1×10^{-166} ; that's a decimal point followed by 165 zeroes and then a one. A very liberal estimate of how many planets there may be, though we have only documented less than 100, is 10^{22} or 10 billion trillion planets, one for every star in the universe. Combining these two probabilities tells us that there are 10^{-144} planets in the entire universe that could support life. Obviously this is far less than one; therefore, by natural processes alone, we shouldn't even be here—let alone some kind of alien life form.

So unless God created life elsewhere, we are alone, and for the materialistic evolutionist, this is a frightening thought.

Problems with Chemical Evolution on Earth

The statistics given above mean that we are really alone in the universe and that there is no hope of finding intelligent civilizations as in the television program *Star Trek*. While it means there is no one out there to threaten our survival,

there is also no one out there to save us from our own mistakes.

This observation highlights why I believe the scientific community and the media became so excited about the possibilities of life on Mars. Efforts to determine how life could have evolved from non-living matter have been so fraught with problems that it makes the possibility of life elsewhere extremely remote. But if it could be proved that life evolved elsewhere, then it would demonstrate that life springs up rather easily, and we just haven't found the right trick here on Earth to prove it. But this just leapfrogs the problem.

But is the evolution of life from non-living chemicals really that impossible? The difficulties fall into three categories, the Chemical Problem, the Thermodynamic Problem, and the Informational Problem. These issues are presented comprehensively in a book by Thaxton, Bradley, and Olsen titled *The Mystery of Life's Origin*[\[4\]](#) and in a chapter in the edited volume by J. P. Moreland, *The Creation Hypothesis*.[\[5\]](#)

Chemical Problems are illustrated by the difficulty in synthesizing even the simplest building block molecules necessary for life from inorganic precursors. Amino acids, sugars, and the bases for the important nucleotide molecules that make up DNA and RNA were all thought to be easily synthesized in an early Earth atmosphere of ammonia, methane, water vapor, and hydrogen. But further experiments showed this scenario to be unrealistic. Ammonia and methane would have been short-lived in this atmosphere; the multiple energy sources available would have destroyed the necessary molecules and water would have broken apart into hydrogen and oxygen. The oxygen was scrupulously avoided in all prebiotic scenarios because it would have poisoned all the necessary reactions.

Thermodynamic Problems arise from the difficulty in assembling all these complex molecules that would have been floating around in some prebiotic soup into a highly organized and

complex cell. To accomplish the task of achieving specified complexity in life's molecules such as DNA and proteins, the availability of raw energy for millions of years is not enough. All systems where specified complexity is produced from simple components requires an energy conversion mechanism to channel the energy in the right direction to accomplish the necessary work. Without photosynthesis, there is no such mechanism in the prebiotic Earth.

The Informational Problem shows that there is no way to account for the origin of the genetic code, which is a language, without intelligent input. Informational codes require intelligent preprogramming. No evolutionary mechanism can accomplish this. Life requires intelligence.

So you can see why evolutionists would get excited about the possibility of finding evolved life elsewhere. It's because life is seemingly impossible to evolve here. So, if it did happen elsewhere, maybe our experiments are just missing something.

Independence Day, The Movie

In the movie *Independence Day*, an alien battle force swoops down on Earth with the intention of destroying the human race, sucking the planet dry of all available resources and then moving on to some other unlucky civilization in the galaxy. But, those indomitable humans aided by good old American ingenuity outsmart those dull-witted aliens and Earth is saved. The story has been told many times, but perhaps never as well or never with such great special effects. The movie was a huge success.

But why are we continually fascinated by the possibility of alien cultures? The movie gave the clear impression that there must be great numbers of intelligent civilizations out there in the universe. This notion has become widely accepted in our culture.

Few recognize that the supposed existence of alien civilizations is based on evolutionary assumptions. The science fiction of *Star Trek* and the *Star Wars* begins with evolution. As I've stated earlier, evolutionists simply rationalize that since life evolved here with no outside interference, the universe must be pregnant with life. Astronomer Carl Sagan put it this way after he had reviewed the so-called success of early Earth chemical evolution experiments:

Nothing in such experiments is unique to the earth. The initial gases, and the energy sources, are common throughout the Cosmos. Chemical reactions like those in our laboratory vessels may be responsible for the organic matter in interstellar space and the amino acids found in meteorites. Some similar chemistry must have occurred on a billion other worlds in the Milky Way Galaxy. The molecules of life fill the Cosmos. [\[6\]](#)

Sagan strongly suggests that the probabilities and chemistry of the universe dictate that life is ubiquitous in the galaxy. But as I stated earlier, the odds overwhelmingly dictate that our planet is the only one suitable for life in the universe. And the chemistry on Earth also indicates that life is extremely hard to come by. The probability of life simply based on chance occurrences is admitted by many evolutionists to be remote indeed. Many are now suggesting that life is inevitable because there are yet undiscovered laws of nature that automatically lead to complex life forms. In other words, the deck of cards is fixed. Listen to Nobel Laureate and biochemist, Christian de Duve:

We are being dealt thirteen spades not once but thousands of times in succession! This is utterly impossible, unless the deck is doctored. What this doctoring implies with respect to the assembly of the first cell is that most of the steps involved must have had a very high likelihood of taking place

under the prevailing conditions. Make them even moderately improbable and the process must abort, however many times it is initiated, because of the very number of successive steps involved. In other words, contrary to Monod's affirmation, the universe was—and presumably still is—pregnant with life.[\[7\]](#)

The only problem with de Duve's suggestion is that we know of no natural processes that will lead automatically to the complexity of life. Everything we know of life leads to the opposite conclusion. Life is not a product of chance or necessity. Life is a product of intelligence.

Without Divine interference we are alone in the universe and without Christ we are—and should be—terrified. The gospel is as relevant as ever.

Notes

1. *Science*, 16 August 1996, 273:924-30.
2. *Creator and the Cosmos*, NavPress, 2001, p. 210.
3. *Ibid.*, pp. 145-199.
4. Lewis and Stanley, 1984.
5. InterVarsity Press, 1994, pp. 173-210.
6. *Cosmos*, Random House, 1980, p. 40.
7. *Vital Dust*, Basic Books, 1995, p. 9.

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PBS Evolution Series

Darwin's Dangerous Idea

Some evolutionists are definitely worried. Creation, intelligent design and a general dissent concerning Darwinian evolution continue to gain ground—so much so that a deliberate counterattack has been launched. Using scientists from around the world, professional defenders of evolution, beautiful nature photography, computer graphics and simulations, the prestige of the PBS NOVA series and the financial backing of Microsoft billionaire Paul Allen, a monumental defense and celebration of evolution has been produced.

The new PBS Evolution Series is a seven part, eight hour documentary originally aired on PBS stations around the country in late September of 2001 and rebroadcast in May and June of 2002. Accompanying the video series is an interactive Web site, 360-page companion book, coordinated teacher training and education, and a determined publicity campaign aimed at getting the series into the nation's high schools.

The explicit goals of the series are to help students understand the critical importance of evolutionary theory in understanding so many scientific and health issues of today—from AIDS to antibiotic resistance to fighting agricultural pests to even how we choose a sexual partner. The producers set out to establish the overwhelming evidence behind evolution and the soundness of the science behind it. They specifically sought to pursue solid science journalism and forego the religious realm.

Essentially, the series has failed on all counts. This beautiful documentary is loaded with speculation, exaggerated evidence and claims, glossing over of legitimate controversy, and a persistent hostility towards any religious perspective deemed incompatible with evolution.

Episode One begins with a dramatization of a conversation between Charles Darwin and Captain Robert Fitzroy of the HMS

Beagle in South America as Darwin is purchasing a fossil. The fictitious conversation clearly pokes fun at the Biblical account of the flood. Darwin was nowhere near as skeptical as portrayed, and Fitzroy was nowhere near as literal either. This opening scene lays the groundwork for a continual assault on history and the evidence to make evolution look as positive as possible and opponents of evolution as silly as possible.

This two-hour opening episode crosses paths with religion several more times in discussions of the philosophical meaning of evolution in an interview of Kenneth Miller, a Darwin defender who finds no incompatibility between his Christian faith and Darwinian evolution. In this opening episode the producers present a confusing contradiction. On the one hand Darwin's dangerous idea precludes any true meaning to life and on the other hand, Darwinian evolution is completely compatible with an informed Christian faith. For more detailed analysis of this episode consult the Discovery Institute's free Viewer's guide available on the Internet at www.reviewevolution.com.

“Great Transformations” and “Extinction”

Perhaps the most foundational episode is Episode Two: The Great Transformations. One's expectation would be the presentation of numerous persuasive transitional forms demonstrating without doubt, the common ancestry of all life. Instead we are treated to a certainty based on the usual arguments from authority, selective fragmentary fossil evidence, and speculative molecular mechanisms.

The opening segment presents the mounting evidence for the amazing transition from a terrestrial wolf-like vertebrate to modern aquatic whales. Lots of fossils and reconstructions are paraded before us, unfolding the supposed story of whale evolution. Complete skeletons are pictured with no indication that they are based on very partial fossil finds. The overall transitional series is discussed with certainty despite the

fact that evolutionists themselves admit that the known members of the transitional series are not thought to be the actual members of the transitional series but just representative of what the actual transitional species may have looked like.[\[1\]](#) Also missing is the admission that, by the very nature of fossils, it can never really be known if any one fossil was ancestral to another.

Also featured in this episode is the stunning Cambrian explosion of animal life forms featuring Simon Conway Morris. Morris freely admits that “this sudden appearance of the fossils led to this term, the Cambrian explosion. Darwin, as ever, was extremely candid, he said, Look, this is a problem for my theory. How is it that suddenly animals seem to come out of nowhere? And to a certain extent that is still something of a mystery.” As the segment develops, no attempt is made to explore or resolve this mystery. The experts make only vague references to evolution tinkering with what already exists. But even tinkering is a design activity, design with a purpose. Natural selection would be better described as a blindfolded man trying to navigate a minefield.

Episode 3 explores the evolutionary significance of extinction. Both the great Permian extinction of 250 million years ago and the KT extinction of dinosaur fame of 65 million years ago are explored and make fascinating stories. Their relation to evolution is obscure, however. Mass extinctions supposedly open up the playing field for new and diverse species to evolve due to less competition. But Darwinian natural selection supposedly thrives on competition. The segments on biological invaders, while important in and of themselves, have little to add to the evolutionary debate. Biological control has been practiced for centuries with no knowledge of evolution.[\[2\]](#) Once again, we witness lots of authoritative posturing but little evidence for evolution.

“The Evolutionary Arms Race” and “Why Sex?”

For many years medical authorities have been warning of the dangers of infectious bacteria becoming resistant to antibiotics. The overuse and misuse of antibiotics in western society has led to an increase in the number of strains of bacteria that are resistant to our primary defense against infection. In Episode Four of PBS’s *Evolution Series* titled “The Evolutionary Arms Race,” we are told this is evolution in action.

First, this statement leads to the conclusion that knowledge of evolution is essential to designing adequate health care. And second, labeling antibiotic resistance as evolution in action implicitly states that evolution is a fact, since antibiotic resistance is a fact. This is another case of a selective use of evidence. What the producers of *Evolution* don’t say is that the mechanisms for antibiotic resistance have been known for years. Usually the capacity to resist antibiotics has always been in the bacterial population and does not result from mutation. Even when a mutation is responsible, a new function is never evolved, just the damaging of an existing function. Sometimes the mutation results in the antibiotic being expelled from the cell faster or taken in more slowly. This doesn’t create a new species and doesn’t fundamentally change the organism.

Another factor left out of the discussion is that antibiotic resistance always comes with a cost of its own. Antibiotic resistant bacteria are always inferior to the original wild-type bacteria. Their growth is stunted. Sometimes these costs can be compensated for but also at additional costs. Resistant bacteria are not better bacteria. Remove the antibiotic and they quickly lose out to the original wild-type bacteria. Therefore, to suggest that in the case of resistant tuberculosis that the bacteria evolved right inside the human

host is highly misleading. The bacterial resistant forms were already present, the bacterium has not changed or evolved at all.

While the episode gives numerous examples of natural selection on a micro scale, the evidence discussed tells us nothing of how antibiotic resistance arose in the first place or how ants, molds, fungi, and bacteria first became intricately associated.

The fifth episode contains perhaps the least science and relevance to evolution, but will certainly be the most entertaining and even titillating for high school students. The episode "Why Sex" tries to ascertain the purpose and even evolution of sexual reproduction. While containing some helpful information and case studies, the program is full of speculative storytelling and an overload of sexual displays and sexual acts from fish to lizards, to birds, to chimpanzees and even a highly unnecessary and suggestive encounter between humans.

Also included is a highly controversial, yet factually presented discussion of evolutionary psychology and one researchers ideas that all forms of human artistic endeavors are little more than sexual displays. Some of their own previously used evolutionary experts would find most of this episode an incredible waste of time and money.

"The Mind's Big Bang" and "What About God?"

The uniqueness of human beings presents a difficult evolutionary puzzle. So much of who and what we are is categorically different from other animal species that trying to account for it by mutation and natural selection presents a tough challenge. In Episode Six, "The Mind's Big Bang," we unfortunately don't get much of an answer.

The episode begins by documenting the amazing human capacity for art in the caves of France. This launches a long series of segments that document the early appearance of artistic expression that has its roots in the development of tool making. Eventually this explosion of capacities rooted in the brain is traced to the remarkable development of human language. As in other episodes there is lots of speculation about the selective advantages of language, but this tells us nothing of how language evolved. The discussion gives the impression that if we can just discover what language is used for, we will know how it evolved. This is typical evolutionary story-telling masquerading as science.

The Cambridge Encyclopedia of Language candidly admits that “For centuries, people have speculated over the origins of human language. . . . [but] the quest is a fruitless one. . . . We have no direct knowledge of the origins and early development of language, nor is it easy to imagine how such knowledge might ever be obtained.”[\[3\]](#) The Discovery Institute’s Viewers Guide also notes that we are told that language was the key to our becoming human. In Episode Two, however, we were told it was the ability to walk on two legs and in Episode Five it was using our brains to choose sexual partners. This confusion of “key events” exposes them for the speculation they truly are.[\[4\]](#)

The final episode “What About God?” reveals the entire series as the propaganda it is meant to be. Here we meet the old science vs. religion argument in all its glory. The Evolution producers go to great lengths to distort the controversy to their own ends. The Scopes trial and the Sputnik-induced revolution in science education are neatly packaged and distorted as science vs. religion. The inquiring and passionate science students and professors who have no quarrel with evolution are favorably portrayed against uneducated parents and naïve Bible literalists. Theistic evolutionist Keith Miller is pictured as a liberator to Wheaton College

students who don't want to be perceived as unintelligent.

What becomes unmistakably clear in this episode is that the reigning naturalistic stranglehold on science education is to be maintained at all costs. Those who oppose it, risk being branded as dangerous or stupid or ignorant or all three. Censorship of facts contrary to evolution is justified in the name of science. The bottom line is that "It's OK for people to believe in God, as long as their beliefs don't conflict with Darwinian evolution. A religion that fully accepts Darwin's theory is good. All others are bad." {5}

The PBS Evolution Web Site

Located at www.pbs.org/wgbh/evolution, the PBS Evolution Web site is a goldmine of information and teaching suggestions along with interactive games and exercises aimed at sharpening one's evolutionary skills. But visitors should also expect that much of the information contained here employs the same sleight of hand that the video series uses in relating evidence for evolution. With such a great volume of information available at the *Evolution* Web site, I will direct my attention to one article as an example. Under the main heading of "Change," an essay is offered critiquing Intelligent Design. The essay is authored by Kenneth Miller, a Brown University biology professor, featured in the first episode as a Roman Catholic who sees no problem with evolution.

The essay is titled "Life's Grand Design" and purports to explain how evolution accounts for the design of nature far better than an intelligent designer would. His entire discussion revolves around the design of the human eye. {6} On page one Miller presents the problem. The eye is exquisite in its design, accomplishing the wondrous effect of color vision with a very complicated design. How could it possibly have evolved one step at a time? On page two, Miller begins his response with the standard blind watchmaker explanation from

Richard Dawkins. Miller emphasizes the gradual slight improvements and that all those that are positive will be selected. This is not necessarily true. It is well known that some genetic changes will be so slight that they do not offer a significant enough selective advantage and therefore, will be lost. Miller ignores the uncomfortable details.

Miller then describes how easy it would be to build an eye from just a few light-sensitive cells. But he starts with "light-sensitive cells." Where did these come from? How did they become light sensitive? The molecular mechanism of light sensitivity is quite complex and one of Michael Behe's examples of irreducible complexity. But once again Miller ignores the uncomfortable details. Miller states, "it is possible to draw a series of incremental changes that would lead directly to the lens and retina eye." But you know, I'm not interested in whether it can be drawn. I want to know how it would evolve biologically.

Finally Miller delivers the *coup de grace*; the eye exhibits design flaws that any engineer would never employ. You see, the human eye seems to have things a little backwards. The light-sensitive cells face the back of the eye or the retina, instead of the front of the eye where the light comes from. Therefore, the incoming light must pass through the nerve cells and blood vessels first, potentially distorting the image. Not only that, but the nerve cells eventually bunch together before punching through the retina en route to the brain, therefore creating a dangerous blind spot. Surely an intelligent designer wouldn't do it that way. The eye is therefore a great example of evolution at work. Evolution simply arrives at the best available solution.

But again, Miller ignores the details. He doesn't reveal that the layer of cells behind the nerve cells, behind the blood vessels and behind the photoreceptor cells, is an immensely important group of cells we will abbreviate as the RPE (Retinal Pigmented Epithelium). The RPE is necessarily in

close proximity to the photoreceptor cells, the rods and cones, because the RPE replenishes the necessary molecules for vision. With the RPE at the very back of the retina, these cells act as an absorptive layer to get rid of excess light. Without the RPE we would be blinded by ordinary sunlight. Also the absorption of excess light sharpens our vision. So the designer has a dilemma. Both the nerves and blood vessels must be in front of the rods and cones or the RPE must be in front because both must be in direct contact with the photoreceptor cells and they all won't fit and function together. Something will get between the light and the light sensitive cells. Putting the blood vessels and nerves in front of the rods and cones creates a very mild light filter, but does create a blind spot where the nerves bundle together. However, putting the RPE between the light and the rods and cones would create a much more detrimental filter and diffusing agent. The vertebrate eye is structured properly when all factors are considered.

"The vertebrate eye provides an excellent example of functional— though non-intuitive design. The design of the retina is responsible for its high acuity and sensitivity. It is simply untrue that the retina is demonstrably suboptimal, nor is it easy to conceive how it might be modified without significantly decreasing function." [\[7\]](#)

As we have seen in this essay, evolution can offer some impressive evidences on first glance. But time and time again, the intricacies of design are in the details.

Notes

1. The story of whale evolution has indeed grown more sophisticated over the last 10-15 years. Indeed, this was one transition that many creationists had a great deal of fun with. How could a land mammal evolve into a whale? How could the transitional forms possibly be functional on land or in

water? If one were to scan the presumed transitional series (found on page 138 of *Evolution* by Carl Zimmer, Harper Collins, 2001) it is quite impressive evidence for evolution. The transitional series, while a little jerky with certain gaps remaining, appears gradual enough and the fossils seem to appear in the expected order and strata. But as always, the truth is in the details. Two recent articles investigate the evidence with some detail and rigor. Ashby Camp has written a fine summary (last modified March 11, 2002) and critique of the fossil evidence for whale evolution that is available from the TrueOrigins website at www.trueorigins.org/whales.asp. Also, John Woodmorappe has analyzed the mixture of characters in some of the whale-like fossils in his article "Walking whales, nested hierarchies, and chimeras: do they exist?" in *TJ* 16(1) 2002: 111-119. *TJ* was formerly *Creation Ex Nihilo: Technical Journal*.

What we learn from these articles is that the true land mammal ancestor of whales is still in dispute. The pakicetids, the first "intermediate," are true land mammals with a few potential aquatic features in their inner ears. The next group known as ambulocetids show some aquatic features but other features distance them from actual whale ancestors. Many of these are not in the proper stratigraphic position. The pakicetids and ambulocetids are all less than 10 feet long; the fully marine Basilosaurus are all over 50 feet in length. Even by evolutionary standards there isn't enough time between these species to evolve even this simple increase in length. None of the species depicted on page 138 of *Evolution* are thought to be actual ancestors of modern whales. The diagram is actually drawn to indicate this fact but most people looking at it won't come away with that impression. Each species is diagrammed as an offshoot of the lineage but not an actual transitional form. How come we always find just "types" of ancestors and never the ancestors themselves? Some character or another always disqualifies the intermediate in question. There seems to be a deeper lesson here that most evolutionists are unwilling to face.

2. The documentation of human interference in the ecosystems of Hawaii and Thailand are summed up with a plea to slow down the rate of human induced extinction and allow nature to take its own more natural and easy-paced course. This implies, however, that humans are somehow outside the loop of nature. If we are just another biological species, then we are only acting according to our own biological nature. How or why should this be suppressed? As in past mass extinctions, the strong, opportunistic and lucky will survive. Perhaps that includes us, perhaps not. In the naturalistic worldview of the series, what's the difference? This is another example of stealthily applying a Christian worldview that gives intrinsic value to nature while maintaining the guise of naturalism. In a naturalistic worldview, nature just is. Choosing to interfere on nature's behalf indicates intrinsic value and worth that can only come from outside nature itself. In the Christian worldview, this comes from God.

3. David Crystal, *The Cambridge Encyclopedia of Language*, Second Edition, Cambridge: Cambridge University Press, 1997, p. 6,290.

4. www.reviewevolution.com, p. 92.

5. Ibid, p. 107.

6. www.pbs.org/wgbh/evolution/change/grand/, p. 1-6.

7. George Ayoub, On the design of the vertebrate retina, *Origins and Design*, Vol. 17(1): 19-22. This article can also be found on the web at www.arn.org/docs/odesign/od171/retina171.htm.

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“Help Me Counter My Prof’s Teachings on Horse Evolution”

I’m a senior at _____ in Agricultural Business Management. In one of my Range classes the professor has laid the foundation for the entire class on evolution. Using the common picture of horse evolution (hyracotherium to equus) he is saying that rangeland plants and systems have co-evolved with large ungulates. I’m struggling on just how he can give the theory of evolution such validity, the difference between adaptation and evolution, and finding information that I can use to refute some of his ideas. I don’t want to argue with him but just want a chance to exchange ideas. If you can direct me to any information or resources on this specific topic, I would appreciate it. Thanks.

The best source of information on the horse series can be found in Jonathan Wells book, *Icons of Evolution* (2000) from InterVarsity Press. He has a full chapter on the subject as well as a chapter on Archeopteryx and the bird-like fossils. The book is easily obtainable at Amazon.com and some Christian Bookstores. Wells has also responded to some of his critics and negative reviews on the Discovery Institute’s website at www.discovery.org. He also has other material at Access Research Network, www.arn.org. I would check on both sites for other helpful material.

Respectfully,

Dr. Ray Bohlin
Probe Ministries

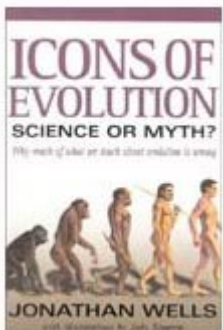
Icons of Evolution

Dr. Ray Bohlin reviews Jonathan Wells' book Icons of Evolution, which exposes the lies and distortions that constitute evolution's best textbook "evidence."



This article is also available in [Spanish](#).

Lies and Distortions Masquerading as Truth in the Halls of Science



Most everyone was required to take biology in high school, and many who went on to college likely took an introductory biology course as an elective, if not as a beginning course for a biology major. Required in most of these courses, mainly because of its inclusion in the textbook, was a section on evolution. Therefore, most people with a secondary education or above are familiar with the more popular evidences and examples of evolution nearly all textbooks have been using for decades. These include the peppered moth story of natural selection, Darwin's finches as an example of adaptive speciation, and the ubiquitous tree of life with its implied common ancestor to all life forms.

These familiar evidences of the creation story of our early 21st century culture are what Jonathan Wells (Ph.D., UC Berkeley, molecular and cell biology; Ph.D., Yale University, religious studies) refers to as the *Icons of Evolution* in his book by the same name (Regnery Publishing, 2000). Wells focuses on ten of these icons and meticulously exposes them to be false, fraudulent or at best, misleading. Many of these difficulties have been pointed out before and are known to a few, but Wells adds a level of sophistication and packages them in a form certain to get the attention of everyone in the

educational establishment. This book is not a plea for creation in the schools or a selective and picky rant against trivial details. It is a frontal assault against some of the most cherished and revered “proofs” of the evolution story. There will be no shortage of controversy around this extensively researched and well-written exposé. If these “Icons” are the best evidence for evolution, or at least the easiest evidence to explain, then one is left wondering what the future of evolutionary instruction could be. Even further, what future might there be for evolution itself?

Wells begins with an icon that itself starts at the beginning, the Miller-Urey experiment. This purports to show that molecules necessary for life could have arisen by simple chemical reactions on an early earth. The Miller-Urey experiment uses an atmosphere of reduced gases: ammonia, methane, water vapor, and hydrogen. Then it adds some energy in the form of sparks, and produces as Carl Sagan said, “the stuff of life.” Dating back to 1953, this experiment has been around for nearly fifty years. The problem is that for at least the last twenty-five years origin of life researchers realized that this atmosphere does not reflect that of the early earth. Many textbooks will begrudgingly admit this, but include the experiment anyway. One can only guess the reason: no other simulated atmosphere works. I suppose that textbook writers would suggest that since we “know” some form of chemical evolution happened, they are justified in not representing the facts accurately!

Tree of Life, Homology, and Haeckel's Embryos

The tree of life is ubiquitous in evolutionary literature. The notion that all of life is descended from a single common ancestor billions of years ago is how many would define evolution. But the actual evidence argues strongly against any such single common ancestor, and most animal life forms appear

suddenly without ancestors in what is known as the Cambrian explosion of nearly 543 million years ago in evolutionary time. The Cambrian documents life forms so divergent that one would predict a fossil record covering hundreds of millions of years just to document the many transitions required from the first multicellular animal ancestor. Current estimates suggest this change took place in less than 5-10 million years. Yet the tree of life, documenting slow gradual changes, persists.

Another critical evidence for evolution over the years has been homologous structures. The forelimbs of all mammals, indeed all vertebrates, from bats to whales to horses to humans, possess the same basic bone structure. This is routinely held up as evidence of having descended from a common ancestor. The different forms simply tell of different adaptive stories, resulting in their unique functions relying on the same basic foundation. What becomes puzzling is, first, a confusion of definitions. *Homology* is **defined** as structures having arisen from a common ancestor.[\[1\]](#) But then homology cannot be used as an evidence of evolution. Something is very wrong, yet textbook orthodoxy concerning homology continues to perpetuate a myth that has been exposed for decades. Second, supposed homologous structures do not necessarily arise through common developmental pathways or similar genes.

Next, Wells turns his attention to perhaps the most inexcusable icon of all: similarities in vertebrate embryos originally pointed out by Ernst Haeckel in the 19th century and used by Darwin in *The Origin of Species* as a powerful evidence for common descent. Haeckel's vertebrate embryos are shown passing through a remarkably similar stage early in development and only later diverging to the specific form. This passage through a common form early in development was seen as obvious evidence for a "community of descent." Yet, once again, the evidence gets in the way.

Since before the dawn of the 20th century, embryologists have known that Haeckel misrepresented the evidence. Vertebrate

embryos never pass through a similar stage. What's more, Haeckel left out the fact that the earlier stages of embryonic development between classes of vertebrates pass through remarkably different pathways to arrive at this supposedly similar intermediate stage. The fraud was recently "rediscovered," though most embryologists have been aware of the inaccuracy all along. This shows the longevity of even falsified evidence, due to its persuasive appeal even in the hallowed halls of science. Perhaps scientists are human after all, seduced by a fraud simply because it makes such a good case for a treasured theory.

The Peppered Moth

Probably the granddaddy of all the icons of evolution is the peppered moth story. In pre-industrial England, the peppered moth was common in entomologists' collections. By the 1840s a dark or melanic form was increasing in frequency in populations across England. By 1900 the melanic form comprised as much as ninety percent of some populations. In the 1950s experiments by Bernard Kettlewell clearly established that this change in frequency from a peppered variety to a dark variety was due to two factors.

First, the surface of tree trunks had changed from splotchy, lichen-covered patchwork, to a uniform, dark complexion, due to increased levels of pollution. The pollution killed the lichens and covered the tree trunks with soot. Second, the peppered variety was camouflaged from predation by birds on the lichen-covered tree trunks, and the melanic variety was camouflaged on the dark tree trunk. Therefore, the switch from peppered variety to melanic variety was due to natural selection, acting through selective bird predation as the trees changed from lichen-covered bark to soot-covered bark. Then with stricter air quality standards, the lichens are returning and the peppered variety is predictably coming back strong.

The peppered moth story became legendary as a classic example of Darwinian natural selection. But within 20 years of Kettlewell's work, cracks began to appear. It was soon noted that the characteristic switch from the peppered form to the dark form happened in areas where the lichens still grew on tree trunks. In other areas, the dark form began to decrease before the lichens began returning on trees. A similar pattern of a switch from a light form to a dark form was observed in ladybird beetles. Birds don't like ladybird beetles. Therefore, predation is ruled out as the selector. It all began to unravel when it was observed that peppered moths of both varieties **never** rest on tree trunks!

Essentially all photographs of moths on the trunks of trees were staged using dead or sluggish moths. They are not active during daylight. If that were the case, how could birds find them on tree trunks at all? Kettlewell released his moths in his mark-recapture-predation experiments in daylight hours, when the moths are naturally inactive. They simply found the nearest resting place (tree trunks in their sluggish state), and the birds gobbled up the non-camouflaged moths. We still don't know exactly where moths rest or whether lichens play any significant role in the story. Yet many biologists insist that the traditional story makes a good example of evolution in action. "To communicate the complexities would only confuse students," they say. Once again, flawed, yet cherished, examples persist because they are just too good **not** to be true!

Birds, Dinosaurs, Fruit Flies, and Human Evolution

The reptile-like bird, Archaeopteryx, has long been heralded as a classic example of a true ancestral transitional form. The improbable change from reptile to bird has been preserved in snapshot form in this remarkable fossil from Germany. Possessing a beautifully preserved reptilian skeleton with

wings and feathers, Archaeopteryx was a paleontologist's dream. This would certainly explain why Archaeopteryx has found its way into just about every textbook. But Archaeopteryx has fallen on hard times. As happens with so many perceived transitions, it is universally viewed now as just an extinct bird, an early offshoot of the real ancestor.

Surprisingly, bird-like dinosaurs from much later geologic periods are hailed as the real ancestors. This is based on structural similarities despite their existence after Archaeopteryx. Never mind that the child exists before the parent. So enamored are some, that birds are just today's feathered dinosaurs. *National Geographic* was recently caught red-faced by perpetrating a fraudulent dinosaur/bird fossil as the real thing in its pages. Scientists have even accepted molecular evidence indicating an *identical* match between turkey DNA and Triceratops DNA. Never mind that the identical DNA match is more likely the result of contamination from a turkey sandwich in the lab and that Triceratops is in the wrong dinosaur family for bird evolution. Such is the power of *wanting* to believe your theory is true.

In the next four chapters, Wells visits the familiar icons of Darwin's finches, fossil horses, mutant four-winged fruit flies, and the ultimate icon, diagrams of the progressive change from ape-like creatures to full human beings. Like the others above, these icons turn out to be far less than what the textbooks suggest. In each case, as in the six discussed above, there are plenty of experts willing to expose the lack of evidence for each icon. But they remain staples in the arsenal of evidences of the evolutionary process. Fossil horses and human evolution turn out also to be indicators of the difficulty evolution has in separating philosophical preferences from conclusions drawn from the evidence.

Textbook writers are either ignorant of current data, which prompts one to be skeptical of the accuracy of the rest of the

textbook, or they are willfully misrepresenting the evidence in order to present a united front on the factualness of evolution. Unfortunately for our children, Wells is able to provide direct quotes indicating that at least some see no problem with including misleading or false data in order to make a point. After all, we know evolution is true, so just because we don't have easy simple stories to tell, doesn't mean they aren't out there waiting to be discovered.

The Scientific Academia Reacts

The reasoning behind these *Icons of Evolution* exposes much of the standard story of evolutionary theory to be mythology rather than science. And if these ten icons have been viewed as the best evidence for evolution, the entire theory needs to be questioned and made accountable to the evidence. It will be interesting to watch the evolutionary community react to these revelations. Evolutionary propagandist Eugenie Scott has already reportedly predicted that the book will be a "royal pain in the fanny" for biology teachers. Will the scientific community be able to respond with an appropriate *mea culpa*, or will there be a battery of excuses and obfuscations? I predict the latter. In the last ten years, the evolutionary establishment has been exerting a great deal of effort to demonstrate that evolution is confirmed to such a degree as to be beyond rational dissent. Organizations such as the National Academy of Sciences, the National Association of Biology Teachers, and the National Center for Science Education have lobbied long and hard for the scientific integrity of the standard evolutionary story. They have held up most, if not all, of these ten icons as the principal pillars of the unassailable evidence for evolution.

Evolution is the principal foundation of the naturalistic world view, presented by many in academia as the only scientific, and therefore, objective, view of reality. Without evolution, metaphysical naturalism cannot stand. As Richard

Dawkins has said, Darwin made it possible to be an intellectually fulfilled atheist.[\[2\]](#) Without evolution, the naturalistic worldview is in serious trouble. Therefore, the scientific community can be expected to rally fiercely behind the evolution story. Just how they do it will prove interesting indeed. *Icons of Evolution* will help draw the evolutionary establishment out from behind the protective bulwark of its authority and force it to defend its theory on the basis of the evidence. This is a fight I believe it must eventually lose in the court of scientific and public opinion.

There are two minor, yet unfortunate, problems with the text. The first, actually a book design problem, regards the difficulty finding the legends for some figures and distinguishing them from the regular text. The second involves an unnecessarily inflammatory discussion of the monetary support evolution receives from the U.S. tax-supported National Institutes of Health and National Science Foundation. While Wells' discussion is accurate, it comes across as sour grapes and may provide a convenient target for evolutionary propagandists to dismiss the book without dealing with the evidence.

These problems aside, *Icons of Evolution* is a landmark work and deserves to be read and studied by all who have an interest in the controversy surrounding not only the teaching of evolution, but also the very theory of evolution itself.

Notes

1. "The term 'explosion' should not be taken too literally, but in terms of evolution it is still very dramatic. What it means is rapid diversification of animal life. 'Rapid' in this case means a few million years, rather than the tens or even hundreds of millions of years that are more typical. . . ." Simon Conway Morris, *Crucible of Creation*, (Oxford: Oxford University Press) 1998, p. 31.

2. Richard Dawkins, *The Blind Watchmaker*, New York, NY: W. W. Norton, 1986, p. 6.

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Man in Search of Himself

A study of man's nature, origin, value and perfectibility raises significant, important questions. Is he the "measure of all things" and made just "a little lower than the angels"? Or has he been reduced to his biochemical components, the quintessence of dust itself? Is it even possible for a man to know "himself"? Is he the glory or the shame of the universe? Or both? Does he even belong here, or is he an interloper—the missing link between his primal ancestors and the really humane being of tomorrow? Is man different from animals and things? How so? And if so, how and why is he different? These are some of the questions considered in this essay, the answers to which create a great divide among people and how they view the reality we all share.

Difference in Degree or Kind?

First of all, if man is to be considered different or unique, how so? Is it a difference in *degree* or *kind*?

Difference in Degree

Some would argue today that man is only different in degree, like the size of the angles in obtuse triangles are different from each other, or like the difference of molecular motions observed in hot and cold water, or the difference between 1 and 100. The concept of difference in degree *only* is at the heart of original Darwinian theory, which sees man as arising

from non-man. According to this view, then, man is different only in degree, not kind, from animals, plants, and things.

Others would modify this view, suggesting that observable distinctions or kinds are really only apparent in the complexities of organic and inorganic development on the planet, and the passage from one qualitative state to another is synthesized with an underlying continuum of degrees which lead to threshold. For example, the link between liquid H₂O and gaseous H₂O is a change in temperature. Or the link between acidic solutions (colorless) and basic solutions (pink) is a color indicator, the change of pH. Lorenz and other ethologists would view man in this light, an observable expression of the continuing processes of mutation and selection. The primatologists doing language studies with chimps and gorillas are conducting their research primarily under the same assumption.

Both of these views have some devastating consequences to man, who continues to resist their implications. The first view suggests that things and animals may assume what has up until now been considered exclusively "human" rights. Adler points this

out in by quoting John Lilly:

The day that communication is established the [dolphin] becomes a legal, ethical, moral and social problem. . . They have reached the level of humanness as it were! (Brackets mine){1}

Of robots, Adler cites a similar conclusion by Michael Scriven:

If it [a robot] is a person, of course it will have moral rights and hence political rights. (Brackets mine){2}

The mixed imagery of man, machines, and animals portrayed in

the “bar scene” of *StarWars* was getting at the same thing, depicting a world where this distinction was removed. And such historians as Arnold Toynbee and Lynn White argue that this very exclusivity of man for rights now denied to animals and robots is that which has brought about an arbitrary and destructive dichotomy between man and the rest of nature:

Christianity, in absolute contrast to ancient paganism and Asia's religions, not only established a dualism of man and nature, but also insisted that it is God's will that man exploit nature for his proper ends.

When the Greco-Roman world was converted to Christianity, the divinity was drained out of nature and concentrated on a single transcendent God. Man's greedy impulse to exploit nature used to be held in check by his awe, his pious worship of nature. Now monotheism, as enunciated in Genesis, has removed the age-old restraint.[*{3}*](#)

Failure to remove this “dichotomy,” they say, has caused men to live *above* nature and to exploit it for selfish ends. Their solution is to erase it and invite man to become “one” again with nature. Herein lies part of the present attractiveness of Eastern, monistic thought to the contemporary Western mind.

It is, however, noteworthy that attempts to eliminate the dichotomy have brought about varying results in both East and West. In the West, the dignity and value of human life has generally lessened in importance during the past 100 years. This despairing theme has been a dominant force in art, music, drama, and literature of the twentieth century. One of the uncomfortable but inescapable by-products of technological advancement and the exactitudes of scientific measurement is pointed out by Adler, who predicts a new (or old?) kind of dichotomy which divides human *from* human:

We can, therefore, imagine a future state of affairs in which a new global division of mankind replaces all the old

parochial divisions based upon race, nationality, or ethnic groups—a division that separates the human elite at the top of the scale from the human scum at the bottom, a division based on the accurate scientific measurement of human ability and achievement and one, therefore, that is factually incontrovertible. At this future time, let the population pressures have reached that critical level at which emergency measures must be taken if human life is to endure and be endurable. Finish the picture by imagining that before this crisis occurs, a global monopoly of authorized force has passed into the hands of the elite—the mathematicians, the scientists, and the technologists, not only those whose technological skill has mechanized the organization of men in all large scale economical and political processes. The elite are then the de facto as well as the de jure rulers of the world. At that juncture, what would be wrong in principle with their decision to exterminate a large portion of mankind—the lower half, let us say—thus making room for their betters to live and breathe more comfortably?[\[4\]](#)

Thus, Planet Earth becomes the private playground of the planned, the privileged, and the perfect!

The second view is equally unacceptable for two reasons, one of which is related to the material just stated. How can value and dignity originate from the Arbitrary? Is a liquid more valuable than a gas? This approach is a merely subjective, decision-making process which asserts that dignity and value exist on one side of the threshold and not on the other. Utilitarians would answer the question in teleological fashion, saying, “It all depends upon the context: what is happening, what is needed, and what is intended.”

Unhappily, the underlying assumption in this answer is an optimistic, flattering one which idealizes man and his intentions. History has not yet confirmed this. Man will not always do the good and right thing, even when he knows what it

is. We will return to this issue later. Another consideration is that of the reversibility of this approach. With no compelling reason for advance, man could undergo a “devolutionary” process as easily as an “evolutionary” one.

Difference in Kind

A third possibility is that man is truly different from animals and things; he is different in *kind*. By definition, we mean that with respect to some property, two things differ in that one *has* the property and the other *lacks* it. A triangle and a square are different in kind, though both are geometric designs. The same can be said of the differences between a zero and a one, or man and non-man. In making this distinction, it is important to remember that “difference” does not imply “better” or “worse”; therefore other criteria are necessary before there would be legitimate reason to treat people better than things or animals. Are such criteria present? This is a crucial question.

It appears that in defining the question of man’s place and purpose (if any) on the planet, one available option is to view man, along with animals, plants and things, as the accidental result of impersonal, cosmic processes. Under such an assumption, man therefore could not possess any superior claim to dignity and value. In fact, values in this line of reasoning must be relegated to the realm of *what is*, since there *is* nothing else. In true Sartrean fashion, man is condemned to be free—all is permitted and possible. The process is ultimately and totally arbitrary. “Ought” is only opinion, whether expressed publicly or privately by a majority or a minority. Thomas Huxley himself admitted that evolution leads to “bad” ethics.[\[5\]](#)

Ethics built upon nature, it would seem, must ever face the difficulty of how to move from the *descriptive* to the

prescriptive and still maintain its own consistency as a system. Konrad Lorenz attempted to answer this by asserting that human behavior traits and “values” are linked to human physiology, and they have simply been passed on because of their survival value.

An alternative answer to the above is that *all* things—plants, animals, and people—are valuable, not because they have so designated themselves to be, but because they are the true and real (though finite) expressions of an Infinite Creator. Their value has been assigned to them by a transcendent One. Man thus has worth and is different because his creator ascribed it to him. No one questions man’s “downward” relationship, his identification and similarities to animal, plant and thing. Granted, he shares his “finiteness” with them, and in varying degrees of complexity, his biochemical make-up.

But is this man’s *only* relationship? Is it possible that man’s differences, dissimilarities, and dignity can never find adequate explanations “downward” but might find their source in a second “upward” relationship? This would be the main difference between the Monist (materialism) and the Dualist (theism/transcendence). Both have their philosophical and theological difficulties. The monist must find his solution within the box he has created by his position (the *cosmos*, observable reality, and nothing beyond).

The dualist claims there *is* something outside the box, but human reason and sense perception cannot tell you much (if anything) about it. Both positions are faced with a dilemma of sorts. It would seem that the criteria to establish special, human value is not possible within the framework of monism, and would only be possible in dualism if the “Transcendent One,” the Creator, through self-disclosure (revelation), had made this human value assessment known to us.

The Uniqueness of Man

If we grant the assumption that man is different in kind—qualitatively different, in what ways is he so? The late Francis Schaeffer often used a term to describe this difference: the “mannishness” of man. This uniqueness falls into several areas, including the anatomical, physiological, cultural, psychological, and moral.

Physical

Anatomically, man’s erectness is unique. There is no observed evolution between primates and man. Primates don’t have feet; they literally have four hands. Primates also lack a circulatory system which would support an erect animal. Man, on the other hand, possesses knees that lock. His head is balanced on his shoulders. His spine is curved in four places for comfort in a wide variety of positions. His arms are short and his legs are long. Primates have the opposite proportions.

Man’s erectness has therefore freed him, but not to the extent that it explains his dominance over the entire animal kingdom. In fact, man has dominated in ways totally unrelated to nature’s way of achieving dominance. Man is basically defenseless. He has no dependable instincts (by comparison), no sharp teeth, claws, camouflage or wings. He is physically weak. A 120-pound monkey is three to five times as strong as a man.[{6}](#)

Jose Delgado points out that even man’s brain cannot explain his dominance. His brain is large, but whales and elephants have larger brains. Neanderthal and Cro-Magnon had larger brains. Whale brains are more convoluted than human ones. Monkeys are very intelligent, but they demonstrate little ability to dominate any intra-species animal.[{7}](#)

Other physiological uniquenesses include man’s eating habits.

He can eat nearly every type of food and is nourished by it. He is only 20% efficient and hence eats four times as much as is needed. He is also in a class by himself with respect to thermoregulation. In the cold, his body applies vasoconstriction, tightens skeletal muscles, shivers, and withdraws surface fluids. In the heat, man is truly unique in his thermogenic sweat glands over his body. The hypothalamus responds to a .01% rise in blood temperature. Horses, on the other hand, sweat only in response to stress and adrenalin in the blood. And primates (nearest to man?) are poor thermoregulators.

Man is also susceptible to disease and slow to heal. He is unique in that his tight skin demands sutures when cut. As a sexual being, he can breed anytime and for a variety of reasons. Ovulation and heat do not necessarily coincide. He interbreeds easily with all members of his species. He is also unique in his nakedness and his "wasp" waist.[\[8\]](#)

Cultural

Culturally, man is global in his habitat. The adaptability explained above is largely responsible for this. He makes tools and fire; he uses language with concepts. He is creative, a maker of art. From the dawn of his history, he appears to have been religious. He is a social creature. His young are long in maturing, thus calling for high, enduring family commitment. The male is (or can be) a part of the family.

Psychological

Philosophers, biologists, and psychologists all have to come to grips with the problems involved in trying to explain all that we observe about man in terms of just physical origins

and causes. To encompass the entire realm of the human powers of reasoning, the complicated strata of human emotions, the apparent use of "free will," as well as the more irrational elements of human behavior within a purely physical explanation seems heroic, to say the least. Recent attempts to eliminate all distinctions between humans and higher animals, and therefore hoping to explain man entirely in terms of what is physical or animal, are far from conclusive.

A major effort has been made to demonstrate, for example, that the use of language, long considered man's exclusive and ultimate claim to distinction within the animal kingdom, is now possible among the primates.[\[9\]](#) Chimps have been taught the American Sign Language for the Deaf and are reported to be using sentences and grammar as they put "sign" blocks in proper order, or punch out the correct order of signs on a computer keyboard.

What is being demonstrated thus far by these language studies is not language, but signaling behavior. . .the proper response to a physical stimulus. Many animals, including pigeons, dogs, cats, horses, rats, etc., use this behavior. Whales and dolphins are known to possess communicative abilities superior to monkeys (are whales a nearer relative to man?). But all of these animals fail to use actual concepts, which are the true test of language and grammar. While a chimp can learn "triangular" as a concept, there is still a physical stimulus to which the animal can relate. A true concept like "political science" can only be learned by man. Grammatical structure in chimps or the playing of a complicated song on a little piano by a pigeon are examples of chaining sequences, or shaping behavior by operant condition *a la* B.F. Skinner. The animal need not understand or grasp the pattern in order to use it. Further, chimps who have been given the tools of communication progress to a limit, and no farther. In other words, a chimp may be taught to communicate to some extent, but once trained, he has very little to say![\[10\]](#)

In the area of man's emotions, studies have tried to show that emotions are totally produced by what is happening psychochemically in the body. But some research demonstrates that other factors enter in and affect the emotions. Drug studies with adrenalin produced different (joyful or sad) emotional states in subjects who experienced the same drug states, but different (euphoric or melancholic) social contexts. Human mental states, to some extent, apparently transcend physical states.[{11}](#)

Physiological models of brain function stress the idea that parts of the brain give rise to and control bodily motions, thoughts, and emotional states. Experiments where rats are eating out of control, or raging bulls are stopped dead in their tracks by brain manipulation, are used to demonstrate the absence of free choice, or self-control among animals or humans.[{12}](#)

Skinner felt that the environment "pushed the buttons" on man's computer brain. In either case, man's will is not to be considered to in any sense "free." When the buttons are pushed (from within or without), man and beast will behave accordingly and predictively.

And yet, even in the animal experiments, one wonders if the conclusions are accurate. How can the purely "mechanical" nature of even an animal's mental state be measured? A viewing of the film shows that when the bull charged Delgado in the bull ring, the electric jolt to the implanted electrodes in its head stopped the animal in its tracks, and it appeared to be stunned as if shot. The bull then wheeled around in bewilderment and pain; it did not turn into "Ferdinand" and begin to sniff the flowers!

Brain research with respect to human will is even more conclusive. Brain mechanisms apparently influence, but do not exclusively determine, human behavior, since moral and social factors have been known to overrule brain damage or brain

control. A woman who experienced a damaged hypothalamus gained nearly 100 pounds after her accident, but one day she looked in the mirror and did not like what she saw. She went on a diet and lost the weight.{13}

Another woman suffering with epilepsy was able to override her emotions and her desire to get up and attack her doctor when he stimulated her amygdala with a brain probe. Other factors came to bear on her aggressive tendencies and modified her response. She admitted she felt like it, but she didn't do it!{14}

These two cases indicate that there are elements present within the human brain which transcend and sometimes do override what the physical parts command or demand. Human behavior can never be reduced and totally explained by physical brain function. Something more is present and inexplicable.

Moral

We now come to an assessment of the moral nature of man. There seem to be three basic positions offered to explain human moral notions or inclinations. And all three accept that man has this unique capacity. . .to distinguish right from wrong. The first is one that views man as **morally neutral at birth**. This was John Locke's view, that man enters the world morally ignorant with a "blank tablet." And therefore man's personality and his moral notions are shaped exclusively by his personal experiences and his environment.

J. B. Watson, the father of behaviorism, embraced this view when he said,

Give me a dozen healthy infants, well-formed, and my own specific world to bring them up in and I'll guarantee to take any one at random and train him to become any type of

specialist I might select—doctor, lawyer, artist, merchant-chief, and yes, even beggar man and thief.[{15}](#)

In “ink blotter” fashion, then, this view sees man’s personality development as extremely malleable, and capable of being shaped dramatically by environmental forces. We do not here deny the strong force that environment can and does play in shaping a human being. But the question must be asked, however: Can *all* personality development be traced to environmental factors? Is there no genetic contribution whatsoever beyond that of providing the “empty tablet?” And how “blank” is blank? Doesn’t it seem that though a conscience must be educated as to specifics of moral behavior, the “tablet” already possesses a moral capacity to comprehend and differentiate moral alternatives? These questions constitute and remain major criticisms of behaviorist theory.

A second view of man presupposes man as essentially good, or on his way to *being* good. In the 19th century, Tennyson spoke to this issue when he wrote:

*Move upward, working out the beast,
And let the ape and tiger die.*[{16}](#)

It is well to remember that this view of Tennyson’s was not inspired by Darwin’s *Origin of the Species*, because it would not be written until ten years after Tennyson wrote these words in his poem, “In Memoriam.” He, like many others, was caught up in the optimistic tide of the Industrial Revolution. His contemporary, Herbert Spencer, sounded a similar note when he said,

“The inference that as advancement has been hitherto the rule, it will be the rule, it will be the rule henceforth, may be called a plausible speculation. But when it is shown that this advancement is due to the working of a universal law; and in virtue of that law it must continue until the

state we call perfection is reached, then the advent of such a state is removed out of the region of probability into that of certainty. . .

As surely as a blacksmith's arm grows large and the skin of a laborer's hand becomes thick; . . .as surely as passion grows by indulgence and diminishes when restrained; . . .so surely must the things we call evil and immorality disappear; so surely must man become perfect." (emphasis mine){17}

This spirit of optimism for an improving moral future was reinforced a little later by Darwin and others. With confidence about the progress of tomorrow, Darwin said:

Hence we may look with some confidence to a secure future of equally inappreciable length. And as Natural Selection [notice capital letters] works solely by and for the good of each being, all corporeal and mental environments will tend to progress towards perfection. (comment mine){18}

H.G. Wells looked to the future with the same optimism when he wrote in his *Short History of the World*:

Can we doubt that presently our race will more than realize our boldest imaginations. . .in a world made more splendid and lovely than any palace or garden that we have known, going on from strength to strength in an ever widening circle of adventure and achievement? What man has done, the little triumphs of his present state. . .form but the prelude to the things that man has yet to do.{19}

Two world wars and accompanying aftermath shook Wells, the Huxleys, C.E.M. Joad, Bertrand Russell, and many others to the core. Optimism turned to discouragement and then to disillusionment. Wells would later write:

Quite apart from any bodily depression, the spectacle of evil

in the world—the wanton destruction of homes, the ruthless hounding of decent folk into exile, the bombings of open cities, the cold blooded massacres and mutilations of children and defenseless gentlefolk, the rapes and filthy humiliations and, above all, the return of deliberate and organized torture, mental torment, and fear to a world from which such things had seemed well nigh banished. . .has come near to breaking my heart.[{20}](#)

Ironically, many leading humanistic psychologists (including such notables as Karl Rogers, Abraham Maslow, Eric Fromm, Rollo May) who watched thirty or forty more years of the twentieth century pass by with Koreas and Vietnams, iron and bamboo curtains, cold and hot wars, famines, atrocities, etc., still do not recognize, admit, nor share Well's perspective, but rather have chosen to ignore the lessons of those years. This galaxy of individuals would still tenaciously hold to the basic conviction that man is **essentially and basically good**. Maslow, considered to be the father of Humanistic Psychology, wrote these words just before the Free Speech Movement at Berkeley and the Vietnam War. Speaking of human nature he said:

Since this inner nature is good or neutral rather than bad, it is best to bring it out, to encourage it rather than suppress it. If it is permitted to guide our life, we grow healthy, fruitful and happy.[{21}](#)

And yet Maslow, with all his optimism, at the same time was forced to acknowledge a apparent weakness in man to demonstrate his goodness and how it might be brought into life experience consistently:

There are certainly good and strong and successful men in the world. . .But it also remains true that there are so few of them, even though there could be so many more, and that they are often badly treated by their fellows. So this, too, must

be studied, this fear of human goodness and greatness, this lack of knowledge of how to be good and strong, this inability to turn one's anger into productive activities, this fear of feeling virtuous, self-loving, respectable.{22}

This brings us to the third view concerning man's moral nature, which sees him as **possessing some innate and ever-present propensity to self-centeredness and pride**. Plato early on recognized the presence and power of evil in human beings when he said: "There is a dangerous, wild, and lawless kind of desire in everyone, even the few of us who *appear* moderate." (emphasis mine){23} Aristotle admitted the same when he observed that most people did not pursue the good:

Their nature is to obey by fear, rather than by right shame; and they do not abstain from the bad because it is wrong, but because of the possible punishment. They live by emotion and pursue those pleasures that are related to emotion, and the means to these pleasures.{24}

The entire Bible and all of the Church Fathers certainly take this view, although man's cruelty is juxtaposed with a nobility which he is deemed to possess, and which is asserted to have resulted from being created in God's image (*Imago Dei*). It is this second concept of nobility and goodness which provides a possible explanation for all those things mentioned above which distinguish and set man apart from all other animals, plants and things. Worship, rational thought, language, moral notions, and creativity are all components stemming from his upward link, not his supposed evolutionary past.

On through history we find other leading thinkers echoing this third view: Thomas Hobbes in *Leviathan* saw man as self-centered, competitive, stubborn, forgiving of himself and condemning others:

For all men are by nature provided of notable multiplying glasses, that is their passions and self-love through which every little payment appeareth a great grievance; but are destitute. . .of those prospective glasses. . .to see afar off the miseries that hang over them. (emphasis mine){25}

Karl Marx shared the same perspective in describing “egoistic” man:

Thus, none of the so-called rights of man goes beyond egoistic man as he is in civil society, namely an individual withdrawn behind his private interest and whims separated from the community.{26}

Sigmund Freud also acknowledged man’s aggressive tendencies:

I adopt the standpoint. . .that the inclination to aggression is an original, self-subsisting instinctual disposition in man, and I return to my view that it constitutes the greatest impediment to civilization. (emphasis mine){27}

B.F. Skinner denies any “innate” disposition, but he does speak about the future with foreboding unless great environmental changes are made:

It is now widely recognized that great changes must be made in the American way of life. Not only can we not face the rest of the world while consuming and polluting as we do, we cannot for long face ourselves while acknowledging the violence and chaos in which we live. The choice is clear: either we do nothing and allow a miserable and probably catastrophic future to overtake us, or we use our knowledge about human behavior to create a social environment in which we shall live productive and creative lives and do so without jeopardizing the chances that those who follow us will be able to do the same.{28}

Skinner's contemporary, ethologist Konrad Lorenz, ignores possible solutions for the future through environmental changes, and simply acknowledges the fact that man's "inherited aggressive tendencies" are yet to be brought under control. To Lorenz, man is not finished; he's still under construction.[\[29\]](#)

We have considered the three major views concerning man's moral nature: man as (1) neutral, (2) basically good, and (3) morally flawed or deficient. In the light of our discussion and abundant observations of man's behavior—both past and present—the third view appears to be the most accurate.

To those who seek to address this issue, both its causes and proposed solutions vary greatly. They do, however cluster around several key ideas:

First, the evolutionists, like Lorenz above, argue that humans have had **insufficient time** to eliminate the primal aggressions from our evolutionary past. To them, it is a vestigial problem. Darwin, Lorenz, and much of humanistic psychology would fall into this category. Geneticists could also fit here, some of whom would perhaps like to help by speeding the process along.

One question that comes to my mind is if man is a part of Nature, as the evolutionist insists, then how has it come about that a method which is so successful in dealing with one part of Nature—the world *outside* of man—has failed so miserably in dealing with the other part of Nature—that which lies *within* him?

Second, a large group holds to the premise that a **proper environment** is the answer to man's moral ills. Plato would create his *Republic*. Hobbes would argue for a *Commonwealth*, Karl Marx a "classless" society, and Skinner would alter the environment through beneficent "planners." It might be well to remember that chuck roast sitting out on the counter *decays*.

But what happens when it is placed in the freezer? It still decays, but at a much slower rate. Environment may check, or even improve certain behaviors, but there is growing evidence that, like the bacteria within the meat, man's basic moral problem is internal.

A third view would focus on **education** of some sort. Beginning with the Greek thinkers and up to Freud and Maslow, there are those who say man should be actively involved in the pursuit of the good—knowledge and self-understanding. The assumption is that if a man *knows* or is shown what is good, he will *do* it. At this juncture, man unfortunately and negatively displays his uniqueness from animals. Where animals readily alter their behavior through simple “trial and error” methods, man will persist in repeating all kinds of behaviors detrimental to himself and others!

The point of agreement with each of these three views is that man's moral deficiency is the result of something lacking. The evolutionist says *time* is lacking. Behaviorists say a *proper environment* is lacking; the educators say that *knowledge* is lacking. But the crux of rightly assessing the moral nature of man is not what is lacking, but what is present and persistent about his behavior over the millenia. The Fall of man was down. [\[30\]](#)

In this regard, John Hallowell comments on Reinhold Niebuhr's insights:

One of America's most astute thinkers, Reinhold Niebuhr, has recalled to our consciousness a fact which both liberalism and Marxism have ignored with almost fatal consequences to our civilization. Evil, he points out, is something real, not an appearance only, and the proper name for it is sin. Its locus is not in institutions, which are but a reflection of human purposes, but in human nature itself. It is pride, self-righteousness, greed, envy, hatred and sloth that are the real evils and the ones from which social evils spring.

When man is thwarted in his attempts to realize justice it is because he is thwarted by his own sinful predisposition. The recognition of this inherent predisposition to sin helps to explain why the best laid plans of men never quite succeed (emphasis mine).{31}

Every academic discipline has a name for this problem of man:

Biology calls it “primitive instinct” or “primal aggression”

History calls it “class struggle”

Humanities calls it “human weakness” or “hubris”

Sociology calls it “cultural lag”

Psychology calls it “emotional behavior”

Philosophy calls it “irrational thinking”

The Bible calls it **sin**.

The teachings of Jesus Christ underscore the truth of this internal flaw in man:

Do you not see that whatever goes into the man from outside cannot defile him; because it does not go into his heart, but into his stomach and is eliminated. . . That which proceeds out of a man, that is what defiles the man. For from within, out of the heart of man, proceed the evil thoughts and fornications, thefts, murders, adulteries, deeds of coveting and wickedness, as well as deceit, sensuality, envy, slander, pride and foolishness. All these evil things proceed from *within* and defiles the man.{32}

While largely unpopular at present, until society again comes to accept and embrace this assessment by the Founder of Christianity as the most accurate and true picture of human nature, no real progress can be made toward the building of a really “Great” society, much less a Global Community devoid of malice. And by their very nature, methodology, and

presuppositions, science and philosophy will never recognize this truth, even when their own findings point in this direction, for they will not accept what God has revealed nor can they discover the truth by their own methods of inquiry.

Fifty years ago, from the decks of the great battleship, *U.S.S. Missouri*, General Douglas MacArthur accepted the unconditional surrender of the Japanese with these words:

We've had our last chance. If we will not devise some greater and more equitable system, Armageddon will be at our door. The problem is basically theological, and involves the spiritual recandescence and improvement of human character, that will synchronize with our matchless advances in science, art, literature, and all the cultural and material developments of the past 2,000 years. It must be of the spirit, if we are to save the flesh (emphasis mine).[\[33\]](#)

MacArthur's prescription for humanity's future was essentially a religious one.

And at the dawn of the 21st century, little progress has been made. We live in a much more unstable and troubled world today than existed sixty years ago even when Hitler and the Japanese were at the pinnacle of their power.

When one observes what is happening throughout the world right now, one must conclude that, in spite of great technological and economic advances, three fourths of the planet is still functioning at the Medieval Level:

- Ethnic Cleansing (a euphemism for genocide).
- Poverty and Famine.
- Governmental corruption and Moral Failure.
- IRS Quota Incentives.
- Ecclesiastical Corruption and Moral Failure.
- Conquest.
- Human Rights abuses, particularly of Women and Children.

- Child and Spousal Abuse.
- Gun Control.
- Lawlessness and Crime.
- Sexual deviants and predators.
- Serial Killers.
- Pornography.
- Prostitution.
- Slavery (Yes, it still exists).
- Corrupt Judicial and Prison Systems.
- Unprincipled, Capricious Juries.
- Drug Traffic.
- Environmental and Ecological Abuse and Corruption.
- Endangered Species.
- Global Warming.
- Weapons of Mass Destruction for Sale!
- Deforestation.
- Over-fishing/depletion of Marine Life.
- Aids and other Killer viruses.
- Reality of Chemical warfare.
- Terrorism—at home and abroad.
- Nuclear Reactors.
- Waste Products.
- Contamination.
- Teen Pregnancy.
- Slaughter of the Innocents.
- Babies for Sale!
- Fetal Tissue and Organs for Sale!
- Sperm Banks of the Rich and Famous for Sale!
- Divorces outnumber Marriages.
- Disintegration of Healthy Family Systems.
- Welfare Mothers.
- AWOL Dads.
- Drive-by shootings and Road Rage.
- Juvenile Killers.
- Teen Suicide.
- Race motivated Crimes.
- Patriot Groups.

- Ku Klux Klan.
- Skinheads.
- Cult Groups.
- Goddess Worship.
- Witchcraft.
- A Media which panders to the baser elements of humanity: Increased Nudity, Sex, Violence, and Filthy Language.
- Same for Advertisements.
- Dearth of Role Models—in Politics, Sports, Music, and Film.
- Ditto Dads, Moms, Brothers, Sisters, Uncles, Aunts, and Grandparents.

Reflecting on the above reminds me of an observation made by someone. The person commented that it was easier for him to believe in the existence of the Devil than to believe that God exists!

The Raging Planet. It would be comforting if we could say that the above behaviors did not include the United States of America. But that is not the case. While the U.S. does not face many of the severe problems and abuses which plague much of the globe, she does, in numerous ways, contribute to the moral instability of the rest of the world. Admired and hated at the same time, America continually sends a mixed message to her neighbors. She has been both a blessing and a curse to the rest of the world, and it is not yet apparent which path she will ultimately choose.

But what *can* be said, in spite of the above, is that she and her citizens are still impacted by the Judeo-Christian heritage which the colonists brought with them from the other side of the Atlantic. The moral and spiritual mindset which they owned as part of their very lives, laid the foundation stones upon which they intended to, and did live in this new land. We today are still being impacted and conditioned by the values they brought with them. By nature, we still largely think and behave within the framework they left us. This was a

legacy of honesty, integrity, hard work, individualism, fair play, dependability, and personal freedom.

Much of this behavior is still evident in America. But what is slipping away, the crucial ingredient that makes it all work, is the spiritual dimension in American life. MacArthur said "It must be of the *spirit* if we are to save the flesh." Jesus said, "All these evil things proceed from *within* and defile the man."

A young father was reading the newspaper and came across a map of the world. He decided to have some fun with his small son. Taking scissors, he cut out the various countries of the world and said to his son, "Bobby, here's a puzzle for you. Take these pieces and put the world back together." The father resumed his reading of the morning paper, and, surprisingly, in less than a minute, the little boy came back and said, "Daddy, come look! I've put the world back together!" The father was amazed that his little son could have accomplished this task so quickly. He asked, "Good for you, Bobby. How did you do it so fast?" The little boy said, "Well, I turned the pieces over and on the back was the picture of a man. I put the *man* together, and the world was right!"

Perhaps we should try it. Nothing else has worked.

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