

“How Should I, as a Non-Christian, React to Creationist Claims?”

Hello, I'm a French science student interested in the creation/evolution debate. I have had no religious upbringing, and don't take the Gospel as gospel truth, so I guess I must be an Evil Darwinist. Where I live, there doesn't seem to be a great “debate” about evolution: I haven't heard of any creationist scientists, besides from when I find Religious sites on the Internet. So I guess we haven't yet been blessed with Pseudoscientific Creationists. True we have fanatics, but they're Catholic and tend to be old Nazis dressed in black who want to go back to saying Mass in Latin, so don't even go near calling themselves scientists. OK I'm being facetious ☐

Anyway, how do you advise me, a non-christian, to react to creationist scientific claims? I hope you'll provide an answer other than “convert to Christianity” – you won't get away that easily: If your claims are scientifically sound, I should be able to accept that. However I often find them a mere imitation of the scientific method, a rational method I understand and respect more than your personal interpretation of the Bible.

By the way I worked on Genetic Algorithms a little (programs using genetic mechanisms to solve specific problems), and have therefore witnessed how complexity and ingenious patterns can arise out of chaos – and how the dominant pattern will switch in a fairly short time, not showing so many intermediate genomes (punctuated equilibrium, generally used to explain holes in the fossil record). I am aware that you don't seem to disagree with microevolution, but I don't believe that “micro-” and “macro-” evolution mean anything. You seem only to use that definition by defining “macroevolution” as what

can't be witnessed directly at our scale, and is therefore false. Why not "micromechanics" and "macromechanics"? We can't prove that planets follow Newtonian mechanics, therefore the sun goes around the moon, 'cos I think the Bible says so.

Anyway, what should I think of your site? It seems cunningly made, maybe even honest. I wouldn't mind discussing this.

PS: I hope I get a better answer than "Go look at our site – it contains all the answers you need".

PPS: I hope you don't get too much of these. Actually I wish you get a lot and read them all. I don't want to be a nuisance, I'm just curious.

Thank you for your interesting message. I am glad to know a little of your background and familiarity with our site. I will therefore assume a few things as I talk with you and rely on you to let me know if anything needs clarification. I certainly do believe that the Intelligent Design movement has something to offer science today. I think the contributions of Michael Behe and William Dembski in their books, *Darwin's Black Box* and *The Design Inference*, lay the critical theoretical and evidential groundwork for a scientifically workable theory of design. It is crucial to realize that this does not mean a complete overhaul of science. Design is only meant to allow for design to be a legitimate hypothesis when addressing questions of the origin of complex systems. Some systems will carry the earmarks of design and some will not.

Behe's concept of "irreducible complexity" claims to identify molecular machines within cells that require a design hypothesis due to the fact that they are composed of multiple parts which rely on each other for any activity. Our own experience tells us that when we see such things, like a mousetrap, an intelligence was necessary to put it together. Even things as ridiculous as a Rube Goldberg machine, inefficient and wasteful as they appear, are still designed.

Arguments about the intent and intelligence of the “designer” are theological and superfluous to the scientific merit of the hypothesis.

Dembski’s emphasis on complex specified information being an indicator of design is another crucial piece of the puzzle. The DNA code is both complex and specified. All other codes we know of from experience require an intelligence to bring them about. These codes may operate on their own once in existence, but require intelligence to put them together. Now this does not in itself require an intelligence to bring about the DNA code, but it should at least be a viable option. Science will currently categorically rule out this possibility since it does not propose a naturalistic process for bringing about the DNA code. I believe this is done out of a philosophical prejudice as opposed to a legitimate scientific problem.

The connections between irreducible complexity and intelligence, and complex specified information and intelligence, are the crucial components of a viable theory of Intelligent Design (ID). I think there is plenty of data from molecular biology and astronomy (fine-tuning parameters of the universe) which already make Intelligent Design a worthwhile scientific pursuit.

Even Richard Dawkins admits that biology is the study of complicated things that give the appearance of having been designed for a purpose. Maybe it isn’t just an appearance. If they have been designed for a purpose, we should be able to tell and it should fall under the umbrella of science since science is primarily a search for truth.

Genetic algorithms are still operating from a computer program utilizing the designed computer itself to arrive at its designs. In other words the potential for design is built into the program and the computer. The genetic algorithm program will not write itself and the program will not run itself apart from the computer, a designed machine.

This perhaps provides a starting point. There are other places on our site that can give you some more details but this should do for now.

BTW, the micro-macro distinction is one that many evolutionists recognize and use so it is not just some creationist invention. But you are correct that it does have to do with the distinction between the minor changes we see happening all around us and the unobserved changes that must have occurred in the past which there is often no discernible fossil evidence for. There is also an embryological component to the distinction. Currently observed microevolutionary changes are all changes that would occur late in embryological development; the overall body plan is not affected. Body plans are determined very early in embryological development which, if all life is descended from a common ancestor, must have also changed in the past. But nearly all mutations observed that occur early in development result in catastrophic deformities. You can't just add up microevolutionary, late development changes and eventually get an early developmental, body plan mutation. They are very different things.

Respectfully,

Dr. Ray Bohlin
Probe Ministries

“Your Articles on Intelligent Design Have Given Me Hope!”

Wow! I feel like I have hope! Lately I've seriously been having doubt about the Christian faith. A big reason for this is the creation/evolution controversy. I'm a freshman at

Baylor University. I've been working on my research paper on Christians' reservations on evolution. It's a topic I picked. . . I thought it might help me out with my struggle. Thank you so much for the articles that you have posted on the Probe Ministries website. After all the negative things I've read about evolution and even Jesus, denying that He was even a historical person, I feel more hopeful now. I feel like there's something with this intelligent design theory! It's a much better sounding alternative than some of the other stuff I've read.

Thanks again!

“Why Won't You Take a Stand on the Age of the Earth?”

Dr. Bohlin,

I just read over your article on the [Age of the Earth](#) to get Probe's stand on the issue. Apparently, the official stand is officially no stand.

I was wondering after I read this statement of yours: “Biblically, we find the young earth approach of six consecutive 24-hour days and a catastrophic universal flood to make the most sense. However, we find the evidence from science for a great age for the universe and the earth to be nearly overwhelming. We just do not know how to resolve the conflict yet.”

How do you (we) know for sure that the earth is millions if not billions of years old? I have been looking into this issue for a while, and I have found that ALL dating methods suffer

from one major problem. They are ALL based on Fallible (un-testable) Assumptions. Now that is a major problem to probe into because it seems that the main reason why Probe is not willing to hold to and defend the clear written revelation in Genesis is because you believe those dating methods are more trustworthy than Genesis 1.

I believe Rich Milne and I qualified our statement sufficiently. To say that we think the young earth position makes the most sense Biblically does not intend to suggest we believe it is the "clear" written revelation of Genesis 1. There are many conservative evangelical Old Testament scholars who do not hold to it. Men who certainly understand the OT and Hebrew much more than this molecular biologist. If I believed it was the clear revelation of Genesis, I would accept it regardless of the scientific evidence.

What you refer to in the assumptions of dating methods is true especially of the radioactive dating methods. But we explain one of our hesitations in the problem of starlight in the body of the paper. I also find it significant that most young earth geologists and physicists (Russ Humphreys is my source from personal conversations during our ICR Grand Canyon trips together) recognize that radioactive dating methods consistently portray an older-to-younger sequence when going from the bottom to the top. So much so that they are searching for a way incorporate this into their flood model. They don't accept the actual dates but the sequence seems real. Therefore the dating methods are not totally without merit. This is more than just suggestive.

I do understand that an international group, meeting through ICR, is working on a paper concerning dating methods which I anticipate with eagerness.

Respectfully,

Ray Bohlin, Ph.D.

“I Have Some Basic God Questions”

Question #1: In John 1:3 it says, “All things were made by him; and without him was not any thing made that was made.” Did God made Satan?

Question #2: Where was God when heaven and earth were not yet created?

Question #3: In John 10:30 Jesus said, “I and my Father are one.” Does this mean that Jesus is the Father also?

Question #4: Does this mean that Jesus knew all the events as the same as the Father also?

Question #5: In Ephesians 2:9 it states, “Not of works, lest any man should boast.” Does this mean “good works” is not necessary?

Question #1: Did God made Satan?

“Satan” means adversary. God created the angel who became Satan (i.e. the Adversary), but God created this angel (and everything else) good (Genesis 1:31). The fall of Satan may be described in Ezekiel 28:11-19. If so, note that before his fall he was created perfect and blameless (vv. 12, 15).

Question #2: Where was God when heaven and earth were not yet created?

Where was God before the creation of heaven and earth? Since God is omnipresent (i.e. present everywhere – See Psalm 139:7-12), He was present “everywhere.” Of course, prior to the creation of the universe, it’s difficult to know precisely

what this might mean. However, since God is eternal, He has always existed; since He is omnipresent, He has always existed “everywhere” (whatever this might mean).

Question #3: Does this mean that Jesus is the Father also?

No; Jesus is the incarnate Son of God. The Father and Son are both God, but they are distinct Persons within the Godhead. John 1:1 helps us to see this. Notice that the Word (God the Son) was WITH God (i.e. the Father). This implies a distinction between the Father and the Son. But we also read that the Word WAS God. This implies that the Son, like the Father, is fully God. This obviously leads us into the mystery of the Trinitarian nature of God. God is one in essence, but subsists as three distinct Persons – the Father, the Son, and the Holy Spirit. Christians do NOT believe in three Gods. They believe in ONE God who subsists as THREE distinct Persons.

Question #4: Does this mean that Jesus knew all the events as the same as the Father also?

While incarnate on the earth, there were some things that were known by the Father, but not the Son (see Mark 13:32). I see this as a temporary and voluntary limitation of the Son’s exercise of His Divine attributes while incarnate upon earth. Philippians 2:5-11 indicates that Jesus “emptied Himself” by becoming a Man. He did not give up His Divine attributes (for then He would no longer be God), but He freely consented to a temporary limitation of the exercise of these attributes while incarnate upon earth. As God the Son, He knows everything that the Father knows. Both the Son and the Father are omniscient (i.e. all-knowing).

Question #5: Does this mean “good works” is not necessary?

Good works are not necessary for salvation, for salvation is a *gift* of God (Ephesians 2:8). Nevertheless, good works are important, for as Paul says in Ephesians 2:10, believers are “created in Christ Jesus for good works, which God prepared

beforehand, that we should walk in them” (see also Titus 3:8). In other words, we are saved by God’s grace through faith in Christ, completely apart from our works. But we are also saved “for good works” (Ephesians 2:10). Genuine salvation (which comes first) produces the fruit of good works (which come after salvation).

The Lord bless you,

Michael Gleghorn
Probe Ministries

“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.

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](#)

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“Why Did God Create the World Knowing Jesus Would Die?”

I would like to know why God would create the world, when He knew in advance that man would sin and Jesus would have to die. I know that God created the world for a relationship with us, and for His glory. It just seems awfully selfish for Him to create a world in which His own Son would have to suffer and die. Was it God the Son on the cross, or God the Father, too, through the Trinity? I have struggled with this question for so long.

You are correct in your observation that God knew, even prior to creating the world, that man would sin. The Father also planned to send His Son as an atoning sacrifice for the sins of the world. As far as I know, the Bible does not explicitly tell us why God chose to create the world as He did. However, since the Bible does tell us that God is perfectly good and wise, I think we are safe in assuming that God had good and wise reasons for doing things this way. We can only speculate on what those reasons might have been. But ultimately, we have to rest in the morally perfect character of God, trusting in His goodness and wisdom.

However, I believe I would take exception with your statement, “It just seems awfully selfish for Him to create a world in which His own Son would have to suffer and die.” Let me make a

few observations and comments about this. First, God the Son was also involved in creation (John 1:1-3; etc.). Second, God the Son was a willing participant in the plan of redemption. The Father and Son do not will different things. They are in perfect agreement with one another. Third, I would argue that this is about the most UNselfish thing the Father could possibly do. The Father loves the Son. What could possibly be selfish about His freely giving His own Son as a redemptive sacrifice for the sins of the world? And the Bible is clear about His motive and reason for doing this. It was love (John 3:16).

Finally, it was God the Son incarnate as the Man Jesus who died on the cross. The Father did NOT die on the cross. Many people in our churches today are quite confused on this issue. One often hears prayers in which the person thanks the Father for dying on the cross. This is incorrect. The Son became incarnate and died for our sins, according to the will of His heavenly Father (which He certainly was in agreement with).

The Lord bless you,

Michael Gleghorn
Probe Ministries

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,

Dr. Ray Bohlin
Probe Ministries