# How to Talk to Your Kids About Evolution and Creation — What Kids Should Know About Evolution

Sue and Dr. Ray Bohlin bring decades of Christian worldview thinking and a PhD in science to the important topic of communicating a balanced rational position to our children and teenagers on questions that they will encounter in our society.

This article is the transcript of a Probe radio program the Bohlins recorded. Sue's questions and comments are in italics, followed by Ray's answers.

### **Problems with Evolutionary Theory**

Why is there a problem with evolution in the first place? Someone once asked you, "What should I believe?" Remember what you told them?

Basically I said you should only believe what there is evidence for. After spending years studying evolution in bachelor's, master's, and doctoral programs, I can tell you that, first of all, there **is** evidence for small changes in organisms as they adapt to small environmental fluctuations.

Second, there **is** evidence that new species do arise. We see new species of fruit flies, rodents, and even birds. But when the original species is a fruit fly, the new species is still a fruit fly. These processes do not tell us how we get horses and wasps and woodpeckers.

Third, in the fossil record, there are only a few transitions between major groups of organisms, like between reptiles and birds, and these are controversial, even among evolutionists. If evolutionary theory is correct, the fossil record should be full of them.

Fourth, there are no real evolutionary answers for the origin of complex adaptations like the tongue of the woodpecker; or flight in birds, mammals, insects, and reptiles; or the swimming adaptations in fish, mammals, reptiles, and the marine invertebrates. These adaptations appear in the fossil record with no transitions. And fifth, there is no genetic mechanism for these large-scale evolutionary changes. The theory of evolution from amoeba to man is an extrapolation from very meager data.

So the problem with evolution is that it is a mechanistic theory without a mechanism, and there is no evidence for the big changes from amoeba to man.

### The Evolution of the Horse

I have our son's eighth-grade biology textbook here. Every textbook, including this one, has a story about the evolution of the horse. It is always offered as proof of evolution. What do you say?

It does not prove much about evolution at all. David Raup, with the Field Museum of Natural History in Chicago, says:

"Well, we are now about 120 years after Darwin and the knowledge of the fossil record has been greatly expanded. We now have a quarter of a million fossil species but the situation hasn't changed much. The record of evolution is still surprisingly jerky and, ironically, we have even fewer examples of evolutionary transitions than we had in Darwin's time. By this I mean that some of the classic cases of darwinian change in the fossil record, such as the evolution of the horse in North America, have had to be discarded or modified as a result of more detailed information—what

appeared to be a nice simple progression when relatively few data were available now appear to be much more complex and much less gradualistic. So Darwin's problem has not been alleviated in the last 120 years and we still have a record which does show change but one that can hardly be looked upon as the most reasonable consequence of natural selection." {1}

There is no chronological sequence of horse-like fossils. The story of the gradual reduction from the four-toed horse of 60 million years ago to the one-toed horse of today has been called pure fiction. All that can be shown is the transition from a little horse to a big one. This is not significant evolutionary change, and it still took some 60 million years. It does not say anything about how the horse evolved from a shrew-like mammal.

### Homologous and Vestigial Organs

Homologous organs: What are they?

Homologous organs are organs or structures from different organisms that have the same or similar function. Evolutionists say this similarity is due to common ancestry. The important question is, Do these organs look and function the same because of common ancestry or because of a simple common design? In other words, do they look this way because they are related to one another, or were they designed to perform a similar function? Homology is not a problem for creationists; we have a different but reasonable explanation. It is the result of common design, not common ancestry.

What about vestigial organs, the ones that are supposedly left over from the evolutionary past? I remember being taught that the coccyx, the tailbone, is left over from when we were monkeys. And the appendix, same thing—we needed it when we were evolving, but we do not need it now. Vestigial organs are unused leftovers from our evolutionary past. Since we do not use them, they have diminished; they have become vestiges of their past function—according to evolutionary theory.

Yes, according to evolution. But we have discovered that these structures do have a function. The prime example is the one you mentioned, the tailbone. The coccyx serves as a point of attachment for several pelvic muscles. You would not be able to sit very well or comfortably without a tailbone.

The appendix was also long thought to be a vestigial organ, having absolutely no function within our bodies, but now we find it is involved in the immune system. It does have a function. It is true that you can live without it. However, as we learn more about the appendix, we realize that if it remains uninfected, it may be serving a very useful purpose.

So in other words, "vestigial organs" are not necessarily useless; we just may not have discovered what their role is.

Yes, very often we have called these things "vestigial" because we never bothered to investigate their function because of their reduced stature. Now we find that things like the coccyx and the appendix really do have a function. And if they have a function, then we cannot call them vestigial; they are not leftovers from our evolutionary past.

I am looking at pictures of embryos in this textbook that are very similar. The explanation given in the book is that they are similar because they have a common evolutionary ancestor. Obviously, this is being advanced as evidence of evolution. Is that what it is?

Definitely not. Embryological development does not follow the history of our evolutionary past. That idea was proven wrong 50 or 60 years ago. It is unfortunate that this error is still in the textbooks. Obviously, there are some similarities among species very early in embryological development; for instance, among mammals, reptiles, amphibians, and birds. That is because they all start from a single cell. As development

progresses, they become less similar. That is exactly what you would expect from an evolutionist **or** creationist perspective.

### The Early Atmosphere of the Earth

You know, I was pretty happy with how this particular textbook treated evolution. It does not even use the word evolution, and it treats it strictly as a matter of theory, not fact. But you came across another, newer high-school textbook that is stridently pro-evolution. I am concerned about some things I see in this chapter on the origin of life. It is talking about the earth's early atmosphere, and this statement is in bold print (so the students know it's going to be on the test, don't you know!) <smile>

"The earth's first atmosphere most likely contained water vapor, carbon monoxide and carbon dioxide, nitrogen, hydrogen sulfide, and hydrogen cyanide."

Then in the very next section it talks about Stanley Miller's famous experiments in 1953. It says the atmosphere he was trying to recreate was made of ammonia, water, hydrogen, and methane. What is going on here?

This particular section is confusing at best and misleading at worst. Clearly they have described Miller's classic experiment, but researchers today agree that the atmosphere used for that simulation did not exist. But yet Miller's experiment produced results. If you use the atmosphere that the textbook describes as the real one, the results are much less significant. The textbook gives the impression that chemical evolution is easy to simulate. But this is far from the truth. One experimenter says:

At present, all discussions on principles and theories in the field [meaning the origin of life] either end in stalemate or in a confession of ignorance. {2}

But you would definitely not get that impression from reading this section of the book.

### **Phylogenetic Trees**

I have another question. Here is this beautiful, tidy chart that shows how neatly different animals evolved from one common ancestor. This evolutionary tree has a crocodile-like animal at the bottom, and all these branches coming out from him, and we end up with turtles and snakes and reptiles and birds and mammals all descended from this one animal. Are we talking science fantasy here, or is there a problem with this evolutionary tree?

Evolutionary trees, or phylogenetic trees, are regularly misrepresented in high-school textbooks. The nice solid lines give the impression that there is plenty of evidence, plenty of fossils to document these transitions—but the transitions are not there. If we were to look at this same type of diagram in a college textbook, all those connecting lines—the transitions—would be dotted lines, indicating that we do not have the evidence to prove that these organisms are related. The transition is an assumption. They assume these organisms are related to each other, but the evidence is lacking. Stephen Gould, a paleontologist and evolutionist from Harvard, says,

"The extreme rarity of transitional forms in the fossil record persists as the trade secret of paleontology. The evolutionary trees that adorn our textbooks have data only at the tips and nodes of their branches. The rest is inference, however reasonable: not the evidence of fossils." [3]

In other words, these charts make pretty pictures, but they're not pictures of reality.

That's correct.

### Natural Selection and Speciation

In this same high-school biology text, I am looking at the chapter on evolution called "How Change Occurs." The big heading for this section is "Evolution by Natural Selection." Natural selection always seems to be linked inseparably to evolution. What is it?

Natural selection is a process where the organisms that are fit to survive and reproduce, do so at a greater rate than those that are less fit. It sounds circular, but it is a simple process, something you can easily observe in nature.

There are some pictures here of England's famous peppered moths. Why do they keep showing up in science textbooks?

They keep showing up because the <u>peppered moth</u> was the first documented example of Darwin's natural selection at work. There were two different color varieties of the same moth: a peppered variety and a dark black variety. The peppered variety was camouflaged on the bark of trees, but the black variety was conspicuous. As a result, the birds ate a lot of black moths. The most common variety, therefore, was the peppered variety. But then the bark of the trees turned dark or black because of pollution. Now the dark form was hidden, but the peppered variety stood out, so the birds ate up the peppered variety. The proportion of peppered moths to black moths shifted in response to the change in the environment.

So here was a change of frequency. At one time we had more peppered moths, and now we have more dark ones. A clear example of natural selection taking place. But the question is, Is this really evolution? I don't think so. It just shows variety within a form. This does not tell me anything as a biologist and a geneticist about how we have come to have horses and wasps and woodpeckers.

When we are looking at peppered moths, we are dealing with

natural selection within the same species. What about a whole new species; for example, Darwin's <u>Galapagos finches</u> off the coast of Ecuador. Isn't that an evidence of evolution?

Here is another area where we need to be careful. Speciation is indeed a real process, but speciation only means that two populations of a particular species can no longer interbreed. The two populations get separated by a geographical barrier such as a mountain range, and after a time they are no longer able to interbreed or to reproduce between themselves.

But all we have really done is split up the gene pool into two different, separate populations; if you want to call them different species, that's fine. But even Darwin's finches, although there are some changes in the shape and size of the bill, are clearly related to one another. Drosophila fruit flies on the Hawaiian Islands—there are over 300 species—probably originated from one initial species. But they look very much the same. The primary way to distinguish them is by their mating behavior.

There is a lot of variety within the organisms God created, and species can adapt to small changes in the environment. But there is a limit to how far that change can go. And the examples we have, like peppered moths and Darwin's finches, show that very clearly.

### Responding to Evolutionary Theory

You have given a creationist's response to evolution in textbooks, but apart from the books there is a personal issue to deal with. How do you think Christian students ought to react when they get to evolution in a science curriculum in school?

First, don't panic. This should not be a surprise; you knew it was going to come eventually. Second, understand that evolution is a very important idea in society today. It is

important to know about it and to understand it. Try to explain it to your kids in that way. You do not have to believe it or accept it, but you need to understand it, know what people mean when they talk about evolution.

What about answering a question on a test?

Here it can get a little sticky. You may feel that you have to lie in order to give the answer the teacher wants. But I do not think that is the case at all. What you are doing is simply addressing the issue of evolution; you are showing that you understand it. You do not have to phrase your answer in such a way that says, "I believe this is the way it is." It may come down to how you state your answer. But you are simply demonstrating your knowledge about evolution, not your acceptance of it.

It seems to me that when you show you understand the concept of evolution, you are demonstrating respect for the teacher and really for the theory too, as the prevalent theory of our day, without having to make a statement of, "Yes, I believe this!"

Sure. The concept of respect, I think, is extremely important, because you have to realize that as a middle-school or high-school student, you are dealing with teachers who have studied or taught evolutionary theory for many years. Their level of understanding is much deeper than yours. You cannot simply go in there and try to convince the class that the teacher is wrong, or that evolution is wrong; you need to play the role of a student. And the role of a student is to learn, to try to understand and comprehend the ideas being discussed. But you do not have to communicate in such a way that you appear to believe evolutionary theory.

I found this page in the textbook we have been looking at, right after the chapters on evolution. It is a message from the authors to the students. It says,

"Evolutionary theory unites all living things into one enormous family—from the tallest redwoods to the tiniest bacteria to each and every human on Earth. And, most importantly, the evolutionary history of life makes it clear that all living things—all of us—share a common destiny on this planet. If you remember nothing else from this course ten years from now, remember this, and your year will have been well spent." {4}

I have never seen a message like this before, from the authors to the student. This textbook obviously has a very strong evolution bias.

Here we have to realize that what is being taught is not science anymore; this is a worldview. This is a statement of naturalism. Obviously, evolution is extremely important to the naturalistic worldview, and the authors are trying to communicate its significance. We are going to see more and more of this bias in textbooks.

Before Christian parents can talk to our kids about evolution, we first must have an understanding of evolution itself, as well as an understanding of the problems with it. We don't need to be afraid of this powerful theory; we do, however, need discernment, in sifting through the rhetoric and distinguishing it from the truth about God's world.

### Genesis 1

Typically, if a child spends any time at all in Sunday school, he gets to the point where he realizes, "Hey, this doesn't relate at all to what I'm learning in school!" Our hope is that we can help parents integrate the truth of Scripture with what is known about origins in the world. As Christians, our starting point for thinking about origins is Genesis 1: "In the beginning God created the heavens and the earth." From that point on, though, there are a lot of different

perspectives explaining the rest of the chapter.

That is true, and unfortunately it not only gets confusing for many of us, but it gets very confusing for many of the academics and the scholars as well. There are a number of different ways to interpret Genesis 1. Let me just run through three of the most prominent views among evangelicals today.

The first is the **literal** or the **very recent** creation account. Some people would call the proponents of this view "young earth creationists." They believe that each of the six days of creation was a twenty-four hour period similar to our days today. These days were consecutive and in the recent past, probably ten to thirty thousand years ago. They hold that the flood was a world-wide and catastrophic event and that all the sedimentary layers were a result of Noah's flood. All the fossils, therefore, are a result of the flood of Noah.

The second way of looking at Genesis 1 is the **Day Age Theory**, sometimes called **Progressive Creation**. Here, each of the six days of creation is a very long period of time, perhaps hundreds of millions of years. God would have created progressively through time, not all at once. The flood was a local event in Mesopotamia or perhaps even a world-wide, but tranquil flood. Therefore, the flood did not leave any great scars or sediments across the earth.

The third view understands Genesis 1 as a **Literary Framework**. This view suggests that Genesis 1 was not meant to communicate history. Peoples of the Ancient Near East used a similar literary device to describe a complete or perfect work; in this case, a perfect creation. God could have created using evolution or progressive creation; the point is that there is really no concordance between earth history and the days of Genesis 1.

We need to explain to our children the view that makes the most sense to us, but at the same time let them know that

there is some disagreement between evangelicals. You may even be confused yourself, and it is okay to communicate to your children that you do not know, either, and that not knowing is all right. We need to give direction but leave the doors open for other options.

Can we know which one is the correct interpretation?

Creation is a mystery. We need to show respect, not only for the mystery, but also for those people holding different views. Evangelicals with backgrounds in Hebrew and Greek differ on their understanding of Genesis 1. So how can we expect a ten-year-old to grasp the problem and make an actual decision?

When we explain the creation account in Genesis 1, we need to communicate to our children that different scholars, all committed to the Bible as God's Word, interpret Scripture differently. The important thing is that we stress that God created the earth, the universe, and every living thing, especially humans.

### Early Human History

Now we are going to look at some specific issues that arise from Genesis in terms of early human history. Let's start with Adam and Eve. Were they real people?

This is a very important question, and I think it is one that most evangelical scholars can agree on. Adam and Eve were real people, and almost all evangelical scholars agree that they were created by God. The reason is that this is the one creation event where God gives us details as to how He went about it. When He created the other mammals and the sea creatures and the birds, He made them or He created them or He formed them, but we are given details about Adam and Eve's creation. We are told how God did it. Adam was formed from dust, and Eve was created from a rib taken out of Adam's side.

It is clear that humans do not have an evolutionary origin.

What about australopithecines, those supposed ape-like human ancestors?

Australopithecines most likely are simply extinct apes. Some quibble as to whether they walked upright and therefore may have been on their way to developing into human beings, but even if they did walk upright, that is not a real problem. They are still extinct apes, and they really had no human qualities whatsoever. There is a very good book that you may want to look at called Bones of Contention. There are a couple of books called Bones of Contention, but this is a recent one by Marvin Lubenow. Lubenow goes into great detail about the actual fossil finds-what they mean, where they fit-all from a creationist's perspective, and he does a very good job. He talks about the fact that human remains seem to span the whole era of supposed human evolution from four million years ago to the present, and that even the one particular type of fossil called homo erectus covers a very broad range. Homo erectus does not really fit where he is supposed to, and the fossils seem to contradict evolutionary theory rather than support it.

There is one more question that keeps coming up again and again. Where did Cain's wife come from?

In some ways it is surprising that this question seems to be so perplexing to people, but in another way I really understand it. Clearly, Cain married a sister. We react against that idea today because of the many laws we have today concerning incestuous relationships. We have laws against incest because the children that result from that type of relationship are often afflicted with a genetic disease. This is because all of us carry detrimental recessive genes within our chromosomes. Closely related family members may carry similar if not the same set of recessive genes. When we marry within the family, those recessives can pair up and result in a child who is genetically handicapped. But in the original

creation, there was no such problem. These were the originally created beings, there were no genetic mutations to worry about.

When it comes to human origins, the Bible gives no room for anything other than God's personal fashioning of Adam and Eve. It is the fact that God personally created mankind that gives us such intrinsic value.

### Noah's Flood

The flood of Noah is extremely important because several New Testament teachings depend on it. The Lord Jesus told us that the time right before He returns will be just like it was in the days before the flood. Peter reminds us that God's judgment fell once on the earth and He has promised to do it again. If the first judgment was not real, what are we to think of the second one?

But all too often what comes to mind when we think of Noah's flood is the image of a cute little round boat with the heads of fluffy sheep and tall giraffes and friendly elephants sticking out of it. We think of it as a harmless bedtime story like Cinderella or Scuffy the Tugboat, a remnant of childhood Bible lessons and storybook times. Did the flood of Noah really happen?

We are talking about an historical event and one that is very serious. It is spoken of in Genesis in a historical narrative. But evangelicals do disagree as to just how it happened. There are basically three different views.

One is the universal catastrophic flood account, where the flood was a world-wide event. It did indeed cover all the high mountains at that time, and it was catastrophic—lots of tidal waves and breaking up of the fountains of the great deep.

The other view is that the flood was universal—it covered the whole earth—but it was a tranquil event and probably did not

leave any scars or sediments on the earth.

And the third view is that the flood was just in the Mesopotamian area. Since its intent was to destroy mankind, and mankind had not spread very far, the flood only had to cover the Mesopotamian area. Again, as with the creation account, we need to tell our kids what our conviction is. What do we think about it? And again, if you are not certain, if you are not sure about your view, go ahead and communicate your uncertainty as well. It is okay to be uncertain about some of these things; scholars do not really know everything about them, either. And we have to be ready to realize that the kids might not even like our particular interpretation, or they may have heard things in school, Sunday school, or church that may differ with our view. But it is okay to give our kids a little bit of room on these kinds of issues.

With all of these different interpretations of the flood, what can we feel safe telling our children? What is the point of the flood? What is the bottom line of this event?

The purpose of the flood of Noah was to destroy mankind as it existed at that time. Where scholars differ is just how far mankind had spread. Some suggest that the human population may only have been a couple hundred thousand, so they may have been contained in the Mesopotamian area. But if humans had been around for four or five thousand years, and they had a chance to multiply and grow, there may have been several millions or tens of millions of people spread across the earth. That may be why some suggest that, in order to destroy mankind, the flood had to be universal. But we still do not know whether the flood was a catastrophic or a tranquil event, and so there is some room for discussion. I think all these different theories are helpful because they allow us to investigate God's Word to the best of our ability and try to determine what it really means.

There is one view of the flood-the universal catastrophic

flood model—that has really captured the attention of much of the Christian community. Several organizations propose this model. In fact, you spent a couple of weeks in the <u>Grand</u> <u>Canyon</u> with one of these organizations investigating the flood model for the formation of the canyon. We want to address a few specifics about this catastrophic model of the flood of Noah. Would you give just a brief outline of this model?

This catastrophic model definitely suggests a very different scenario than the cute animals or the little round boat. We are talking about the breaking up of the fountains of the great deep and huge amounts of water rocking back and forth across the earth. The young earth creationists suggest that most of the sedimentary layers were formed during the flood. Most of the fossils that we find in those sedimentary layers, therefore, would have been laid down as a result of the flood of Noah. There should also be evidence around the earth of the catastrophic formation of all these sedimentary layers.

How close to the truth is this model? Does it explain everything?

There are a lot of things that it does explain. There is evidence for catastrophic origin for most, if not all, sedimentary layers. Organisms seem to require a very rapid burial in order for them to be formed as fossils. But there are problems with this model as well, and I think it is important that we recognize what those are. For instance, all the different types of sediment would have to be the result of just one event, a catastrophic flood. When we look at these sedimentary layers, we have sandstone, limestone, mudstone, shale—all different types of rocks—but they all would have had to come from the same event, and that is a bit of a problem. The majority of Christian geologists believe that the strata are due to other events like river floods, deposits from big storms or hurricanes that occurred periodically or, in some cases regarding the sandstones, even desert sand dunes. While the catastrophic model is a captivating idea, I do not see a need to force ourselves to accept it or reject it at this time.

There is a lot of work to be done concerning this model. If you have a curious, science-oriented child, why not encourage him or her to pursue a career in science and become a part of the group that tries to investigate it?

### Cavemen

Another question the kids are often curious about: Where do cavemen fit into the Bible?

Most creationists believe cavemen were the early survivors of the flood. Remember, if the purpose of the flood was to destroy mankind, then most of these fossils would be individuals who survived the flood or lived soon afterwards. Cro-Magnon man and Neanderthal man, and probably even fossils described as *homo erectus*, are all post-flood humans, descendants of Noah's three sons. The so-called primitive characteristics could be due to genetic in-breeding, faulty diets, and life in a harsh environment.

### Racial Differences

Where do the different races come from? If we are all descended from one couple, Adam and Eve, why are there different colors of skin?

Races would have originated with Noah's three sons and their wives. Several sets of genes produce the wide variety of skin color present in the current population. It is not difficult at all to envision genetically-similar populations becoming isolated after the flood and being the progenitors of the different races. Much of this genetic variability may have been contained in Noah's sons' wives, arising from genetic segregation that took place since the creation of Adam and Eve. Adam and Eve were probably people of intermediate skin

color with most, if not all, of the genetic variability present in their genes.

### **Dinosaurs**

We cannot talk about explaining creation to our kids without addressing the inevitable question of the dinosaurs. Where do dinosaurs fit into the Bible?

There is no question that kids today, particularly boys, are really enamored of dinosaurs. The answer depends on what your approach is.

If you are approaching creation from an old earth perspective, then the dinosaurs have been extinct for seventy or so million years and there is no reason to expect them to be mentioned in the Bible at all. Men and dinosaurs never existed together.

If, however, you are approaching creation from a young earth model, where everything was created in the fairly recent past, then dinosaurs must have existed at the same time as man because they were created on the same day, only ten to thirty thousand years ago. And that raises the question as to whether Noah took dinosaurs on the ark.

It is difficult to imagine a brontosaurus getting on the ark, and most creationists answer that by suggesting he probably did not take adult dinosaurs on the ark, just juveniles or small babies. The extinction of the dinosaurs then was probably due to the flood. Even if Noah did take some on the ark, apparently the climate and ecology of the earth had changed dramatically as the result of the flood and they were not able to survive following the flood.

But it also raises the very distinct possibility that some dinosaurs may still exist in small, isolated pockets around the world. I do not want to add too much credence to this, but there are very intriguing stories—and I just want to call them stories for right now, not fact—from the Congo of different

kinds of dinosaurs being reported by villagers and even some missionaries seeing very large reptile-like creatures out in the swamps. We have cave paintings from South America of dinosaur-like creatures. We have legends from all over the world about dragons, in China and the East and in Europe during the Middle Ages. We seem to have it in our heads that big reptiles are out there somewhere. It is a lot easier to think of them as being left-overs from the flood rather than having existed in small pockets for sixty or so million years since they became extinct in an evolutionary perspective. It is also feasible that dinosaurs could be mentioned in the Bible.

You mean under a different name?

Yes. For instance, Job 40 talks of a creature called "behemoth" in verses 15 to 24. He feeds on grass, he has strength in his loins,

What we have tried to do in this discussion is help parents understand the biblical accounts of creation in the early earth so that they can explain it to their children. Although we have presented a few options instead of absolutes, we can still tell our kids that God is the Creator and Sustainer of all things, and that the flood was a real event, although some of the details of how these things happened may escape us at this time. This approach allows us to communicate clear biblical truth while at the same time encouraging a child's curiosity and desire to investigate God's world. This is our Father's world, and it delights Him when His children want to discover it and search out the mysteries of the past, of history, of His story.

#### **Notes**

1. David Raup, "Conflicts Between Darwin and Palentology," Field Museum of Natural History Bulletin, vol. 30, no. 1 (1979): 25.

- 2. Kraus Dose, "The Origin of Life: More Questions Than Answers," *Interdisciplinary Science Review* 13 (1988): 348-56.
- 3. Stephen J. Gould, *The Panda's Thumb* (New York: Norton, 1980), 181.
- 4. Kenneth Miller and Joseph Levine, *Biology* (Englewood Cliffs, N.J.: Prentice-Hall, 1991), 335.
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#### See Also:

- <u>Pictures and Account of Ray and Sue Bohlin's Visit to the</u>
  <u>Galapagos Islands</u>
  - All the Probe articles on Origins

### "Is Dark Matter Another Attack on God?"

I was reading an article about experiments with dark matter in a very deep underground lab in South Dakota. What is dark matter and is this another secular atheist way to circumvent God?

The simple answer is that dark matter is material in space that cannot be directly detected with telescopes because it does not emit any type of radiation. Ordinary dark matter is made up of cold gas, stars with so little mass that they never ignite nuclear fusion, small rocks, etc. Even though astronomers cannot directly see dark matter, they can detect its presence through its effects, e.g. impact on movement of galaxies. (See the excerpt from an article by Dr. David Rogstad below for more information on this.) In attempting to measure the amount of dark matter required to create the

observed effects, astronomers have developed a theory that there are two types of dark matter: ordinary dark matter and exotic dark matter. Exotic dark matter only weakly interacts with light and ordinary matter, so it is different than the material we normally deal with on earth. I would guess the experiments you were reading about were dealing with the study of exotic dark matter.

Based on this definition, the existence of dark matter does not directly bear on the existence of God. I have not seen any arguments from atheists that point to dark matter as supporting evidence for their claims. Given that dark matter in space can only be detected through very sophisticated, expensive methods, I would not expect the Bible to talk about it directly, and it does not. Of course, the Bible makes it clear that "For by Him [Jesus Christ] all things were created, both in the heavens and on earth, visible and invisible" (Col. 1:16). No matter how you define dark matter, it is covered by this verse.

Going a little deeper, it is true that some (but not all) of the ways used to estimate the amount of dark matter in the universe assume that the universe has been expanding for billions of years. Some Christian scientists, such as those at Reasons to Believe, who promote a Biblical creation model based on a 13.7 billion-year-old universe, point out that the existence of dark matter in just the right quantities is further evidence that our earth is fine tuned for life to such a degree that it could only be through the work of a transcendent, all powerful, intelligent creator. RTB has a number of articles on dark matter which you can see at <a href="https://www.reasons.org/search/node/?keys=%22dark+Matter%22">www.reasons.org/search/node/?keys=%22dark+Matter%22</a>.

If you are interested in understanding the different Christian perspectives on the origins of the universe, check out our Faith and Science section at www.probe.org; in particular you may be interested in "Christian Views of Science and Earth History"

#### www.probe.org/christian-views-of-science-and-earth-history

I hope this answer is helpful for you.

God bless, Steve Cable

Excerpt from Dr. David Rogstad on history of dark matter: "Based on his observation that clusters of galaxies do not have enough matter to remain gravitationally bound, Fritz Zwicky proposed (in 1933) the existence of dark matter to provide the needed gravity. Since then, there has been a growing body of supporting evidence, including flat rotation curves in large spiral galaxies, larger-than-expected velocity dispersion in elliptical galaxies, and certain measured characteristics of the cosmic microwave background, all of which require the presence of dark matter for their explanation." [www.reasons.org/filling-gap]

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## "How Does the Continental Divide Relate to Creationism?"

My 10-year-old son is studying the great continental divide in school—how does that relate to creationism? His teacher said it doesn't affect your view of creation, even though she is claiming it happened millions of years ago.

The fact that the great continental divide exists and how it got there are two very different issues. Honestly, for a 10-year old, he can probably learn all he needs to know about the

divide without needing to debate how or when it arose. If the geological development is part of the lesson, your son can always regard the timeframe a separate issue, or simply resolve to understand how most geologists explain it without committing himself to accepting their entire explanation. I would recommend he learn what is required of him and simply resolve to keep his mind open to the timeframe issue. Creationist flood-model geologists would explain the rising of the Rockies (hence the continental divide) by the same mechanisms as evolutionary geologists, just over a much shorter time frame.

Hope this helps.

Respectfully,

Ray Bohlin Probe Ministries

### There is a God

In his 2008 article, Dr. Michael Gleghorn examines some of the arguments and evidence that led Antony Flew, the world's most notorious atheist, to change his mind about God. Dr. Flew died in April 2010. To our knowledge, he never entered into a saving faith in Jesus Christ. That is a point of great sorrow for us at Probe.

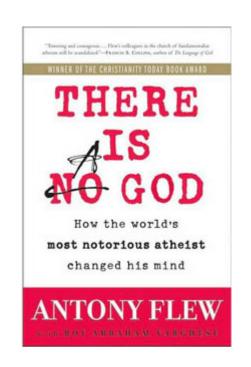
### A Much-Maligned Convert



I remember how astonished I was when I first heard the news of his "conversion." In 2004, longtime British atheist philosopher Antony Flew publicly announced that he now believed in God! I could

hardly believe it. Professor Flew had been an atheist for the greater part of his life and, until 2004, his entire academic career. As the "author of over thirty professional philosophical works," he "helped set the agenda for atheism for half a century." {1} But then, in 2004, at the age of eighty-one, he changed his mind!

As one might expect, the reaction to Flew's announcement varied widely. Theists naturally welcomed the news that one of the most important atheistic philosophers of the past century had come to believe in God. Skeptics and atheists, on the other hand, made little effort to conceal their contempt. Richard Dawkins characterized Flew's conversion as a kind of apostasy from the atheistic faith and implied that his "old age" likely had something to do with it.{2} Others suggested that the



elderly Flew was trying to hedge his bets, fearful of the negative reception he might have in the afterlife. And Mark Oppenheimer, in an article for *The New York Times*, argued that Flew had been exploited by Christians and that he hadn't even written the recent book that tells the story of his "conversion." {3} That book, *There Is A God: How the World's Most Notorious Atheist Changed His Mind*, is the subject of this article.

By his own admission, the eighty-four-year-old Flew suffers from "nominal aphasia" and has difficulty recalling names. Nevertheless, it's quite unfair to insinuate that his belief

in God is due to something like senility. He may have problems with his short-term memory, but he's still capable of explaining what he believes and why. In the introduction to his book he responds to the charge that he now believes in God because of what might await him in the afterlife by pointing out that he doesn't even believe in an afterlife! "I do not think of myself 'surviving' death," he explains. {4} The charge that Flew didn't actually write his book is also misleading. While it's true that he didn't physically type the words, the content was based upon his previous writings, as well as personal correspondence and interviews with Mr. Varghese. In other words, the ideas in the book accurately represent the views of Professor Flew, even if he didn't type the text. With that in mind, let's now take a closer look at some of the arguments and evidence that led "the world's most notorious atheist" to change his mind about God.

### Did Something Come from Nothing?

In a chapter entitled "Did Something Come From Nothing?" Flew addresses issues surrounding the origin of the universe. Is the universe eternal, or did it have a beginning? And if it had a beginning, then how should we account for it?

Flew observes that in his book *The Presumption of Atheism*, which was written while he was still an atheist, he had argued that "we must take the universe itself and its most fundamental laws as themselves ultimate." {5} He simply didn't see any reason to think that the universe pointed to some "transcendent reality" beyond itself. {6} After all, if the universe has always existed, then there may simply be no point in looking for any explanation why.

However, as the Big Bang model of the origin of the universe became increasingly well-established among contemporary cosmologists, Flew began to reconsider the matter. That's because the Big Bang theory implies that the universe is not eternal, but that it rather had a beginning. And as Flew observes, "If the universe had a beginning, it became entirely sensible, almost inevitable, to ask what produced this beginning." {7}

Of course, many scientists and philosophers felt quite uncomfortable about what a universe with a beginning might imply about the existence of God. In order to avoid the absolute beginning of the universe, an event which seems to smack of some sort of supernatural creation, they proposed a variety of models that were consistent with the notion that the universe had existed forever. Unfortunately, all these models essentially suffer from the same problem. When carefully examined, it turns out that they can't avoid the absolute beginning of the universe. Thus, according to Stephen Hawking, "Almost everyone now believes that the universe, and time itself, had a beginning at the Big Bang." {8}

Reflecting upon his initial encounter with the Big Bang theory while he was still an atheist, Flew writes, "it seemed to me the theory made a big difference because it suggested that the universe had a beginning and that the first sentence in Genesis ('In the beginning, God created the heavens and the earth') was related to an event in the universe."{9} He concludes his discussion by noting that "the universe is something that begs an explanation."{10} He now believes that the best explanation is to be found in a supernatural creative act of God. Interestingly enough, this view finds dramatic confirmation in the exquisite "fine-tuning" of our universe which allows for the existence of intelligent life.

### Did the Universe Know We Were Coming?

Flew observes that "the laws of nature seem to have been crafted so as to move the universe toward the emergence and sustenance of life." {11} Just how carefully crafted are these laws? According to British physicist Paul Davies, even

exceedingly small changes in either the gravitational or electromagnetic force "would have spelled disaster for stars like the sun, thereby precluding the existence of planets." {12} Needless to say, without planets you and I wouldn't be here to marvel at how incredibly fine-tuned these constants are. The existence of complex, intelligent life depends on these fundamental constants having been fine-tuned with a precision that virtually "defies human comprehension." {13}

So how is the observed fine-tuning to be explained? Flew notes that most scholars opt either for divine design or for what might be called the "multiverse" hypothesis. According to this hypothesis, our universe is just one of many others, "with the difference that ours happened to have the right conditions for life."{14}

So which of these two theories best explains the amazing fine-tuning of our universe? Flew correctly observes that "there is currently no evidence in support of a multiverse. It remains a speculative idea." {15} The fact that multiple universes are logically possible does absolutely nothing to prove that they actually exist. Indeed, the multiverse hypothesis appears to be at odds with the widely recognized principle of Ockham's razor. This principle says that when we're confronted with two explanations of the same thing, we "should prefer the one that is simpler, that is, the one that uses the fewest number of entities . . . to explain the thing in question." {16}

Now clearly in the case before us, the theory of divine design, which posits only *one* entity to explain the observed fine-tuning of our universe, is much simpler than the multiverse hypothesis, which posits a potentially *infinite* number of entities to explain the same thing! The philosopher Richard Swinburne likely had Ockham's razor in mind when he wrote, "It is crazy to postulate a trillion (causally unconnected) universes to explain the features of one universe, when postulating one entity (God) will do the

The observed fine-tuning of our universe is one more reason why Antony Flew now believes there is a God. And as we'll see next, the mystery of life's origin is yet another.

### How Did Life Go Live?

One of the reasons consistently cited by Flew for changing his mind about the existence of God has to do with the almost insuperable difficulties facing the various naturalistic theories of the origin of life. In particular, Flew observes, there is a fundamental philosophical question that has not been answered, namely, "How can a universe of mindless matter produce beings with intrinsic ends, self-replication capabilities, and 'coded chemistry'?" {18}

When considering the origin of life from non-living matter, it's crucially important to note a fundamental difference between the two. "Living matter possesses an inherent . . . end-centered organization that is nowhere present in the matter that preceded it." [19] For example, lifeless rocks do not give evidence of goal-directed behavior, but living creatures do. Among the various goals one might list, living beings seek to preserve and reproduce themselves.

This leads naturally to the second difficulty, namely, providing a purely naturalistic account of the origin of organisms that are able to reproduce themselves. As philosopher David Conway points out, without this ability "it would not have been possible for different species to emerge through random mutation and natural selection." Since different species can't emerge from organisms that can't reproduce themselves, one can't claim that self-reproduction emerged through the evolutionary process. Conway concludes that such difficulties "provide us with reason for doubting that it is possible to account for existent life-forms . . .

without recourse to design." {20}

The final difficulty Flew raises concerns a purely naturalistic origin of "coded chemistry." Scientists have discovered that the genetic code functions exactly like a language. {21} But as the mathematician David Berlinski asks, "Can the origins of a system of coded chemistry be explained in a way that makes no appeal whatever to the kinds of facts that we otherwise invoke to explain codes and languages?" {22} In other words, if every other code and language we're aware of results from intelligence, then why think the genetic code is any different? As physicist Paul Davies muses, "The problem of how meaningful . . . information can emerge spontaneously from a collection of mindless molecules subject to blind and purposeless forces presents a deep conceptual challenge." {23}

Ultimately, such challenges became too much for Flew. He concludes his discussion of these difficulties by noting, "The only satisfactory explanation for the origin of such 'end-directed, self-replicating' life as we see on earth is an infinitely intelligent Mind." {24}

### The Self-Revelation of God in Human History

In a fascinating appendix to his book, Flew has a dialogue with prominent New Testament scholar N.T. Wright about Jesus. Although Flew is not a Christian and continues to be skeptical about the claims for Jesus' bodily resurrection, he nonetheless asserts that this claim "is more impressive than any by the religious competition." {25} But why is this? And what sort of evidence is there for the resurrection of Jesus? This is one of the questions to which N.T. Wright responds in his dialogue with Flew.

Although we can only scratch the surface of this discussion, Wright makes two points that are especially worth mentioning:

the historicity of the empty tomb and the post-mortem appearances of Jesus. But why think these events actually happened as the Gospels claim? Because, says Wright, if the tomb were empty, but there were no appearances, everyone would have concluded that the tomb had been robbed. "They would never have talked about resurrection, if all that had happened was an empty tomb." {26}

On the other hand, suppose the disciples saw appearances of Jesus after His crucifixion. Would this have convinced them of His resurrection if His tomb were not empty? No, says Wright. The disciples knew all about "hallucinations and ghosts and visions. Ancient literature—Jewish and pagan alike—is full of such things." {27} So long as Jesus' body was still in the tomb, the disciples would never have believed, much less publicly proclaimed, that He had been raised from the dead. This would have struck them as self-evidently absurd. For these and other reasons, Wright concludes that the empty tomb and appearances of Jesus are historical facts that need to be reckoned with. The question then becomes, "How does one account for these facts? What is the best explanation?"

Wright concludes that, as a historian, the best explanation is that "Jesus really was raised from the dead," just as the disciples proclaimed. This is clearly a *sufficient* explanation of Jesus' empty tomb and post-mortem appearances. But Wright goes even further. "Having examined all the other possible hypotheses," he writes, "I think it's also a *necessary* explanation." {28}

How does Flew respond to this claim? Asking whether divine revelation in history is really possible, he notes that "you cannot limit the possibilities of omnipotence except to produce the logically impossible. Everything else is open to omnipotence." {29} Flew has indeed come a long way from his former atheist views. For those of us who are Christians, we can pray that he might come further still.

#### **Notes**

- 1. Roy Abraham Varghese, preface to Antony Flew, *There Is A God: How the World's Most Notorious Atheist Changed His Mind* (New York: Harper Collins, 2007), vii.
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- 3. Mark Oppenheimer, "The Turning of an Atheist," *The New York Times*, November 4, 2007, <a href="http://tinyurl.com/2lvkaj">http://tinyurl.com/2lvkaj</a>.
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- 11. Ibid., 114.
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13.

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- 21. Walter L. Bradley and Charles B. Thaxton, "Information and the Origin of Life," in *The Creation Hypothesis: Scientific*

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- 24. Flew, There Is A God, 132.
- 25. Ibid., 187.
- 26. N.T. Wright, "The Self-Revelation of God in Human History: A Dialogue on Jesus with N.T. Wright," in Flew, *There Is A God*, 210.
- 27. Ibid.
- 28. Ibid., 212-13.
- 29. Flew, There Is A God, 213.
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### "What About the Water Vapor Canopy Hypothesis?"

You say that the literal translation makes the most sense, yet you say that there are things about it that make no sense. Well here is my suggestion. I am a literalist... I believe what the Bible says about creation — literal. 6 days. But read your Bible about the creation of the "sky." God separated the waters from the waters. It doesn't say that he created mists, or clouds from the waters to make up the sky... it says he separated the water from the water. In fact, wind, rain, and rainbows are not mentioned anywhere in the Bible until the flood... so what if the atmosphere was different in the original times? What if there was literally a solid water "layer" above the sky... this would create an atmosphere like a green-house

effect on earth… therefore totally changing the oxygen and most importantly CARBON levels in the air… which would totally ruin all "carbon-dating" tests prior to the flood… which would then in effect also explain why people lived longer prior to the flood. Not only were we closer to perfection then… but there was probably better levels of oxygen in the air… and oxygen is known to have healing properties (especially  $0_3$ ). Just a thought to consider…

Thank you for reading and writing.

I am very familiar with the Canopy Hypothesis you describe. I even accepted and taught it for several years. While definitely still around, it has fallen into disfavor in many creationist circles for two primary reasons.

The first is biblical. The description of Day Two in Genesis describes the separation of the waters and that God placed an expanse in the midst of the waters. This has usually been interpreted as the atmosphere. However, on Day Four, God places the sun, moon, and stars in this same expanse.

The second involves the inherent instability of any water vapor canopy above the earth's atmosphere. So far calculations show that it would require a miracle of constant intervention to keep it in place until the flood. There is also a difficult problem with the condensation of the canopy into water droplets to fall as rain for forty days and nights. This would release a tremendous amount of heat that would cause additional problems.

Hope this helps.

Respectfully,

Ray Bohlin

### "Body Building": Edifying Thoughts about Our Bodies

### Why Should I Care About This?

Our culture is obsessed with the human body. Have you turned on the television or stood in the supermarket checkout line recently? Images and information about the human body bombard our senses from almost every direction. And what we believe about the body can make a huge difference for our daily life, and for the life beyond! That's why we need to think carefully about a Christian view of the body. For when our ideas about the body go wrong, a lot of related Christian beliefs can also be affected.

For example, in the early centuries of the Christian church there were some religious groups called Gnostics. Their name derived from the Greek term *gnosis* which means "knowledge," because they thought that salvation came through secret knowledge. In their view, reality consisted of two primary components: matter (which was evil) and spirit (which was good). {1} Since matter was evil, the human body was likewise viewed as "intrinsically degenerate." {2}

The Gnostics' negative beliefs about the human body influenced their thinking in other areas as well. Their ideas about the incarnation, the afterlife, and human sexuality, were all affected. Consider the incarnation. Christians believe that God the Son became a real human being with a real human body.

But this view was repulsive to some of the Gnostics. While some believed that the divine Christ temporarily assumed a human body, they did not think this state was permanent. And others denied that Jesus had a physical body at all. They believed that Jesus only appeared to be human. {3} In reality, he was a completely spiritual being. This was especially true after his resurrection, which Gnostics generally held to be a purely spiritual (and not physical) event. {4}

The Gnostic view of the afterlife was similar. After death, Gnostics believed, they would be reunited with God in the spiritual realm. Unlike Christians, they had no desire for the resurrection of the body. The body was a prison from which they would gratefully escape at death.

Consider finally their views about human sexuality. Although some Gnostics may have lived a sexually immoral lifestyle, the majority seem to have rather been ascetics. {5} They treated the body harshly and rejected sexual activity and procreation as earthly, physical, and unspiritual. Such activities kept one in bondage to this evil material world.

Unfortunately, these Gnostic beliefs about the body influenced Christianity to some degree. But if we look at what the Bible teaches, what we find is much more interesting and exciting.

### The Goodness of the Human Body

What do you believe about your body? Is it something good—or evil?

In striking contrast to the Gnostics, who believed both the material world and human body were intrinsically evil, the biblical writers present a positive conception of both.

The first verse of Genesis declares, "In the beginning God created the heavens and the earth" (Gen. 1:1). A few verses later we learn that God created human beings in His image and

likeness (Gen. 1:26-27). And at the end of chapter one we're told that everything God made "was very good" (Gen. 1:31). So unlike the Gnostics, who believed the material world was the work of an evil, inferior deity, the biblical writers viewed the physical universe and human body as part of the good creative work of the one true God.

Moreover, in the biblical view humanity occupies a very special place in the created order. Having been made in God's image, men and women are viewed as the crown of creation. But what does it mean to say that we are made in God's image? As one might expect, this is a question that has been given extensive consideration throughout the history of the church.

On the one hand, we probably shouldn't think of the divine image primarily in *physical* terms, for God is a *spiritual* being. Still, it's probably also a mistake to think that our bodies aren't *in any sense* made in God's image. Genesis 1:27 says that God created man in His image. Reflecting on this statement, some scholars have noted that it's "not some part of a human or some faculty of a human, but a human in his or her wholeness [that] is the image of God. The biblical concept is not that the image is *in* man and woman, but that man and woman *are* the image of God."{6} Since God created man in His image as an embodied personal being, it seems quite natural to suppose that the material (as well as immaterial) aspects of our being are *both* included in what it means to be made in God's image.

In Genesis 2 we have a more detailed account of the creation of man and woman. In verse 7 we read that "the Lord God formed man of dust from the ground, and breathed into his nostrils the breath of life; and man became a living being." This verse indicates that there are both material and immaterial components of man's being—and each *in some sense* bears God's image. This is why in the Christian view human beings have inherent worth and dignity. It's also why in contrast to the Gnostics we believe in the goodness of the human body.

### The Importance of the Incarnation

Did you know that your beliefs about the human body can affect your view of Jesus and why He came? As we've seen, the biblical writers saw the human body as God's good creation (Gen. 1-2). Naturally enough, such radically different views of the body influenced how Gnostics and Christians understood the doctrine of the incarnation as well.

The term "incarnation" means "'to enter into or become flesh.' It refers to the Christian doctrine that the pre-existent Son of God became man in Jesus." {7} Our first hint that something like this would happen comes shortly after man's fall into sin. In Genesis 3:15 God tells the serpent, the agent of temptation in the story, "I will put enmity between you and the woman, and between your seed and her seed; He shall bruise you on the head, and you shall bruise him on the heel." The verse promises a coming Champion or Deliverer, who would be born of a woman, and who would deliver the decisive death-blow to Satan. Later we learn that this Deliverer, the Lord Jesus Christ, redeems humanity from the tragic consequences of sin and death by giving His own life as a substitute in our place (1 Jn. 2:2; 4:10). The death of God's Son for the sins of the world was possible because of the incarnation. By becoming a real man, with a real body, He experienced a real death on the cross.

One of the clearest statements of the incarnation is found in the Gospel of John: "In the beginning was the Word . . . and the Word was God . . . And the Word became flesh, and dwelt among us" (1:1, 14). This Word made flesh, the Lord Jesus Christ, told His followers that He had come "to give His life a ransom for many" (Mk. 10:45). While Gnostics generally regarded the death of Jesus as irrelevant for salvation, Christians see it as absolutely essential.

In Revelation 5:9 a song is sung in praise of Christ, who through His death "purchased men for God from every tribe and

language and people and nation." In the early church, some theologians said that what Christ did not assume, neither did He redeem. They meant that if Christ did not really have a human body, then neither did He redeem our bodies. This is why the incarnation is so important. By becoming fully human and dying for our sins, Christ secured the complete redemption of all who put their trust in Him.

### **Human Sexuality**

Those unfamiliar with the Bible might be surprised to learn how much it has to say about sex. And what it says is neither prudish nor out of date. On the contrary, its counsel is both supremely wise and eminently practical. {8}

In fact, unlike the ancient Gnostics, the Bible has a very positive view of human sexuality. An entire book of the Bible, the Song of Solomon, is largely devoted to extolling the beauty and wonder of sexual love within the God-ordained covenant of marriage. Sex was God's idea and is rooted in His original creation of man and woman as sexual beings (Gen. 1:27). While one of God's purposes in creating us this way was for procreation (Gen. 1:28), it certainly wasn't His only purpose. God also intended sex to be a pleasurable and meaningful expression of intimacy and love between husband and wife (Prov. 5:18-19).

According to Jesus, the biblical ideal of marriage is a lifelong, exclusive commitment of one man to one woman (Mk. 10:2-9). Citing the Genesis creation account He says, "For this reason a man will leave his father and mother and be united to his wife, and the two will become one flesh" (Mk. 10:7-8; cf. Gen. 2:24). As one writer has observed, "Here we have a blueprint for human sexual love: through the sexual act the man and woman have a wonderful new kind of intimacy. This is called being 'one flesh,' and it is designed to be exclusive and faithful." {9}

Unfortunately, man's fall into sin brought about the misuse and abuse of God's good gift. And as one might expect, the Bible doesn't shy away from addressing such things. Essentially, the biblical view is that sex is to be fully enjoyed as a wonderful gift from God, but *only* within the sacred bonds of marriage between one man and one woman. Every other kind of sexual activity is lumped into the category of "sexual immorality." And this we are told to flee, for as Paul told the Corinthians, "he who sins sexually sins against his own body" (1 Cor. 6:18).

But Paul then went even further. He called the believer's body "a temple of the Holy Spirit." He said that Christians have been "bought at a price" and should "honor God" with their bodies (1 Cor. 6:19-20). This reveals something of the value which God places upon the human body. And He encourages us to do the same.

## **Bodily Death and Resurrection**

Did you know that your view of the human body affects your view of eternity?

Throughout history humanity has entertained a variety of ideas about what happens after death. Some think that physical death is the end of our personal, conscious existence. While we might "live on" in people's memories, we don't live on in any other sense. Others believe that while the body dies, the human soul or spirit continues to exist—perhaps on a higher spiritual plane, perhaps in a spiritual heaven or hell, or perhaps somewhere else. According to this view, our bodily existence is only temporary. Once we die our bodies are discarded, but our souls go on living forever.

In the early years of the church, many Gnostics believed that people would experience different fates at death. Some would just cease to exist. For them, death was the end. Others could enjoy some sort of afterlife through faith and good works. From a Gnostic perspective, these people were the Christians. Only a few, however, namely, the Gnostics themselves, could expect a truly fantastic afterlife in which they would be reunited with God in the divine realm. {10} In other words, the Gnostics anticipated being liberated from this evil material world, including their bodies, and being reunited with God in a completely spiritual existence. Interestingly, although there are differences, many Christians seem to expect an afterlife that's very similar to that envisioned by the Gnostics.

But what the Bible teaches is really quite different. Although it comforts Christians with the reminder that to be absent from the body is to be at home with the Lord (2 Cor. 5:8), this is not the believer's final state. Instead, we're told to eagerly await the resurrection of our bodies, which will be modeled after Jesus' resurrected body (1 Cor. 15:20-23, 42-49). As Christians, we don't look forward to a purely spiritual (in the sense of non-physical) afterlife. Instead, we await a bodily existence in a new heaven and new earth which is completely free from the presence and power of sin (2 Pet. 3:10-13)! Just as Christ was raised physically from the dead, so one day He will likewise raise all men from the dead. Some will enjoy His presence forever; others will be shut out from His presence forever (Matt. 25:46; Jn. 5:28-29). Which experience shall be ours depends entirely upon relationship to Christ (Jn. 3:36; 2 Thess. 1:8-10). So why not put your trust in Him and enjoy forever the new heavens and new earth in a new, resurrected body? You're invited, you know (Rev. 22:17).

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- 2. Mary Timothy Prokes, Toward a Theology of the Body (Grand

Rapids: Eerdmans, 1996), 9.

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- 5. Ibid., 21.
- 6. Tyndale Bible Dictionary, eds. Walter A. Elwell and Philip Wesley Comfort (Wheaton, Illinois: Tyndale House Publishers, 2001), s.v. "Image of God."
- 7. Harper's Bible Dictionary (1st ed.), ed. Paul J. Achtemeier (San Francisco: Harper & Row, 1985), s.v. "Incarnation" by Frank J. Matera.
- 8. A number of ideas in this section were informed by the article "Sex, Sexuality," in Tyndale Bible Dictionary.
- 9. Amy Orr-Ewing, *Is the Bible Intolerant?* (Downers Grove, Illinois: InterVarsity Press, 2005), 113.
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## "What's Your Position on Creationism?"

#### Kerby,

Thanks for coming to the Worldview Weekend. I know you don't hold to evolutionism, per se. But after the conference in Wichita last week, I was wondering, do you agree with the Bible's chronology of the earth being older than the sun. That the record in Genesis (and Ex. 20:11) of the six days of creation are to be understood as ordinary days. Finally, do you agree with the idea of no bloodshed and disease before the

fall of man? In other words, should I believe the Bible or what I have been taught?

The reason why I am asking is I know that I have compromised in these areas of Genesis and lead many down a road of disbelief because of that.

Please send me your answers with Biblical references.

Thank you for your e-mail. You might want to visit the Probe web site (www.probe.org) and read two articles. One deals with different views of science and earth history. The other deals with why we believe in creation. I think these two will help you think through the issues and would accurately represent the perspective of all of us on Probe Ministries staff.

Thanks for writing.

Kerby Anderson
Probe Ministries

## Intelligent Design and the Bible

Jan. 16, 2006

Psalm 19 tells us that the heavens declare the glory of God. Romans 1 reminds us that the creation shows His divine attributes. So we shouldn't be surprised that scientists are finding evidence of design in nature.

The subject of intelligent design is in the news due to school board decisions and court rulings. So it is important that Christians be thinking clearly about this important topic.

When I have an opportunity to speak on the subject of intelligent design, I find that most Christians don't exactly know what to make of this research. On the one hand, they appreciate that scientists working in such diverse fields as astronomy and biology are finding evidence of design. Whether you look in the telescope at the far dimensions of space or in a microscope at the smallest details of life, God's fingerprint can be found.

But I also find that Christians are ambivalent about the idea of intelligent design. If you go to the websites of many creationist groups, you will find them to be critical of intelligent design research because it doesn't identify a creator. They want the scientists to connect the dots of their research to the God of the Bible. I would like to suggest another way of looking at this issue.

Those of us who defend the historical reliability of the Bible often use the good work done by archaeologists. These archaeologists uncover historical evidence that gives us a better picture of the ancient near east. We then take their research and show how it fits with the biblical description of history. Although some archaeologists are Christians, many are not. But that doesn't keep us from using their research to show the truthfulness of the Bible.

We can think of scientists working on intelligent design in the same way. They are pursuing a line of research that shows design in nature. We can then take their research and show how it fits with the biblical description of creation. Although many of the scientists working on intelligent design are Christians, some are not. That shouldn't keep us from using their research. We can take their research and connect the dots.

In their book *The Privileged Planet*, Guillermo Gonzalez and Jay Richards show that the earth is positioned in the best place in our galaxy for complex life to exist. They also show

that the earth is also positioned in the best place for scientific discovery. Christian theologians and apologists can take this research and point to the fact that God created the heavens and earth and they show His divine care.

Michael Behe in his book *Darwin's Black Box* shows that there are numerous molecular motors within the cell that intricately assembled. He demonstrates that they have irreducible complexity. Christian theologians and apologists can take this research and show that there is evidence of design. Design implies a designer, and the Bible tells us that God is the designer of life.

Scientists working on the subject of intelligent design may not be willing to identify the Creator. But that shouldn't keep us from using their research to connect the dots and lead people to the Creator.

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## The Case for a Creator

It has been the popular belief for decades that science and Christianity are light years apart. However, as our knowledge of cosmology, astronomy, physics, biochemistry, and DNA has continued to grow, this supposed gap has all but disappeared. Lee Strobel, award-winning journalist and former atheist, explores these and many other compelling evidences in his latest book, *The Case for a Creator*. In this article we will discuss just a handful of these evidences, as presented in his book, and find out how science itself is steadily nailing the lid on atheisms coffin. {1} Lets begin with the argument from cosmology.

## Cosmology

Cosmology is the study of the origin of the universe. In investigating this field of study, Lee Strobel interviews philosopher and theologian, Dr. William Lane Craig. Craig describes in great detail what he calls "one of the most plausible arguments for God's existence, the Kalam cosmological argument. {2} This argument has three simple steps: Whatever begins to exist has a cause. The universe began to exist. Therefore, the universe has a cause.

Craig then explains that when he first began to defend the Kalam argument he anticipated that the first step of the argument, whatever begins to exist has a cause, would be almost universally accepted. It was the second point, the universe began to exist, which he believed would be more controversial. However, so much evidence has accumulated, Craig explained, that atheists are finding it difficult to deny that the universe had a beginning. So theyve begun to attack the first premise instead. {3}

One such attack was presented in the April 2002 issue of *Discover* magazine. In an article entitled Guths Grand Guess, the author describes how quantum theory allows for thingsa dog, a house, a planetto be materialized out of a quantum vacuum. One professor is quoted as saying, Our universe is simply one of those things which happens from time to time. {4} Could such an audacious claim be valid?

Craig debunks this claim by making two very important points. First, These subatomic particles the article talks about are called virtual particles. They are theoretical entities and its not even clear that they actually exist as opposed to being merely theoretical constructs. {5} Secondly, however, these particles, if they are real, do not come out of nothing. The quantum vacuum is not what most people envision when they think of a vacuum that is, absolutely nothing. On the contrary, its a sea of fluctuating energy. This begs the

question, So where does this energy come from? It must have a cause. So even quantum theory fails to explain the origin of the universe without a Creator. Rather, as Craig explains, the first cause of the universe is the transcendent personal Creator{6} of the Bible which states that In the beginning God created the heavens and the earth.

### **Anthropic Principle**

What is called the anthropic principle essentially states that all seemingly arbitrary and unrelated constants in physics have one strange thing in common these are precisely the values you need if you want to have a universe capable of producing life. {7} To explore the particulars of this, Strobel interviews Robin Collins, who has doctorates in both physics and philosophy.

Collins, who has written several books on this subject, is asked to describe one of his favorite examples. He proceeds to illustrate the fine-tuned properties of gravity. He does so by comparing the range of possible gravitational force strengths with an old-fashioned linear radio dial that spans the entire width of the known universe. He says,

Imagine that you want to move the dial from where its currently set. Even if you were to move it by only one inch, the impact on life in the universe would be catastrophic. . .

That small adjustment of the dial would increase gravity by a billion-fold. . . .

Animals anywhere near the size of human beings would be crushed. . . . As astrophysicist Martin Rees said, In an imaginary strong gravity world, even insects would need thick legs to support them, and no animals could get much larger. In fact, a planet with a gravitational pull of a thousand times that of the Earth would have a diameter of only forty

feet, which wouldn't be enough to sustain an ecosystem. . . .

As you can see, compared to the total range of force strengths in nature, gravity has an incomprehensibly narrow range of life to exist. [8]

Collins goes on to discuss several other constants which show a remarkable degree of fine-tuning such as the mass difference between neutrons and protons, electromagnetic forces, strong nuclear forces, and the cosmological constant. In fact, one expert has said that there are more than thirty separate physical or cosmological parameters that require precise calibration in order to produce a life-sustaining universe. {9}

It is this amazing degree of fine-tuning within physics which Collins believes is by far the most persuasive current argument of the existence of God. {10} The deeper we dig, Collins concludes, we see that God is more subtle and more ingenious and more creative than we ever thought possible. And I think that's the way God created the universe for usto be full of surprises."{11}

#### Astronomy

It had been said for years that there's nothing unusual about Earth. It's an average, unassuming rock that's spinning mindlessly around an unremarkable star in a run-of-the-mill galaxya lonely speck in the great enveloping cosmic dark, as the late Carl Sagan put it.{12} However, this is no longer thought to be the case. Even secular scientists are talking about the astounding convergence of numerous unexpected "coincidences" that make intelligent life possible on Earth, and in all likelihood, nowhere else in the universe.

In exploring these recent discoveries, Lee Strobel meets with Dr. Guillermo Gonzalez and Dr. Jay Wesley Richards, coauthors of the book *The Privileged Planet*. After hashing out a long

list of unique characteristics of our own galaxy, our sun, and our planet, they then began to discuss another amazing coincidence: a whole new dimension of evidence that suggests this astounding world was created, in part, so we could have the adventure of exploring it.{13}

One of the more interesting examples given is that of a solar eclipse. Perfect solar eclipses have allowed scientists to do things such as determine specific properties of stars and confirm predictions associated with Einsteins theory of relativity. Such things would be extremely difficult to explore if it werent for total eclipses. However, such eclipses are unique to Earth within our solar system. Of the nine planets and over sixty moons, only Earth provides the optimal scenario for viewing an eclipse. This is possible because our moon, which is 400 times smaller than our Sun, happens to also be exactly 400 times closer. This allows for just the right conditions for a perfect solar eclipse.

What intrigues Gonzalez is that the very time and place where perfect solar eclipses appear in our universe also corresponds to the one time and place where there are observers to see them. {14} Richards adds, What is mysterious is that the same conditions that give us a habitable planet also make our location so wonderful for scientific measurement and discovery. So we say there's a correlation between habitability and measurability. {15}

Indeed, this is exactly what we would expect if an all-loving, all-powerful God created the universe not only to sustain man but also, and most importantly, that man could find Him through it.

#### **Information**

In 1871, Darwin suggested in a personal letter that life may have originated spontaneously in some warm little pond, with

all sorts [of chemicals] present.{16} However, in his day the immense complexity of living cells was virtually unknown. Today thats not the case. Modern science has revealed that cells are extremely complex and that this complexity is governed by the information packed structures of DNA. This raises the question, Where did this information come from?

To answer this question Strobel enlists the help of Dr. Stephen Meyer, who has degrees in physics, geology, history, and philosophy. During the course of their discussion, Meyer elaborates on various explanations as to the origin of information in the first living cell. After describing the virtual impossibility of simple random chance over time producing such information, and acknowledging the fact that virtually all origin-of-life experts have utterly rejected such an approach, {17} Strobel focuses Meyer in on a more recent attempt at an explanation, that which at times has been called biochemical predestination.

Meyer says the idea is that the development of life was inevitable because the amino acids in proteins and the bases, or letters, in the DNA alphabet had self-ordering capacities that accounted for the origin of the information in these molecules. {18} He then goes on to explain why this notion just isnt true.

First, he notes that the kind of self-ordering we see in nature, such as that in salt crystals, is repetitive; a particular sequence is simply repeated over and over again. It would be like handing a person an instruction book for how to build an automobile, Meyer explains, but all the book said was the-the-the-the. You couldn't hope to convey all the necessary information with that one-word vocabulary. {19}

Secondly, and more importantly, he points out that science has demonstrated the complete absence of any attraction between the four letters of the DNA code themselves. So theres nothing chemically that forces them into any particular sequence,

Meyer states. The sequencing has to come from outside the system.  $\{20\}$ 

For Strobel, as well as many scientists, the conclusion is compelling: An intelligent entity has quite literally spelled out evidence of His existence through the four chemical letters in the genetic code. Its almost as if the Creator autographed every cell.{21}

#### Consciousness

Webster defines consciousness as the quality or state of being aware especially of something within oneself. {22} According to Darwinists, the physical world is all there is. Consciousness, therefore, is nothing more than a byproduct of the properties of chemicals. As far back as 1871, evolutionists believed that the mind is a function of matter, when that matter has attained a certain degree of organization. {23} Is this really true? Is the mind simply, as MITs Marvin Minsky put it, a computer made of meat? {24} Or is the Bible correct in its assertion that men and women are comprised of both material and immaterial components?

To address this question, Strobel interviews Dr. J. P. Moreland, who has degrees in chemistry and theology, and a Ph.D. in philosophy. One of the most compelling arguments presented by Moreland during this interview was the positive experimental evidence that consciousness and the self are more than simply a physical byproduct of the brain. For example, Moreland said, neurosurgeon Wilder Penfield electrically stimulated the brains of epilepsy patients and found he could cause them to move their arms or legs, turn their heads or eyes, talk, or swallow. Invariably the patient would respond by saying, I didn't do that. You did. According to Penfield, the patient thinks of himself as having an existence separate from his body. No matter how much Penfield probed the cerebral cortex, he said, There is no place . . . where electrical

stimulation will cause a patient to [think]. Thats because [thought] originates in the conscious self, not the brain. {25}

As Strobel notes in agreement, it is evidence like this which has led one pair of scientists to conclude that physics, neuroscience, and humanistic psychology all converge on the same principle: mind is not reducible to matter. . . . The vain expectation that matter might someday account for mind . . . is like the alchemist's dream of producing gold from lead. {26}

#### Conclusion

It is evidences like these, as well as the many others presented by Lee Strobel, which has continued to persuade scientists in every field of study that there must be a Designer. Naturalistic explanations are not sufficient to explain the beauty, complexity, and design that we observe both around us and within us. Strobel, indeed, presents an amazingly strong case for a Creator.

#### **Notes**

- 1. Lee Strobel, *The Case for a Creator* (Grand Rapids, Mich.: Zondervan, 2004) jacket.
- 2. Ibid., 97.
- 3. Ibid., 98.
- 4. Brad Lemley, "Guth's Grand Guess," *Discover* (April 2002) p. 35.
- 5. Strobel, 101.
- 6. Ibid., 110.
- 7. Ibid., 126.
- 8. Ibid., 132.
- 9. Ibid., 132.
- 10. Ibid., 130.
- 11. Ibid., 150.
- 12., Ibid., 153.
- 13. Ibid., 185.

- 14. Ibid., 186.
- 15. Ibid., 186.
- 16. Francis Darwin, *The Life and Letters of Charles Darwin* (New York: D. Appleton, 1887), 202.
- 17. Strobel, 229.
- 18. Ibid., 232.
- 19. Ibid., 234.
- 20. Ibid., 235.
- 21. Ibid., 244.
- 22. Merriam-Webster's Collegiate Dictionary, 10th ed., s.v., "Consciousness."
- 23. Thomas Huxley, "Mr. Darwin's Critics," *Contemporary Review* (November 1871)
- 24. Strobel, 250.
- 25. Ibid., 258.
- 26. Ibid., 272.

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# Dr. Ray Bohlin Responds to Attacks on Intelligent Design

To the editor of Newsweek:

Jonathan Alter must have thoroughly enjoyed writing this incredibly polemical piece, taking full advantage of every stereotype, argument from authority, straw man, and unsupported assertion his space would allow. He craftily gives credit to scientific sounding arguments against evolutionary theory while claiming they have all been discredited without mentioning the well-reasoned answers to these criticisms. As an example he cites Ken Miller's criticism of ID without mentioning that Miller himself has been respectfully answered,

critiqued and refuted.

If simply rehashing the old science vs. religion argument is the best the media and the general science community can do, the battle is over. I have been making a scientific case against Darwinism and for Intelligent Design for over thirty years. As one credentialed in science, a Discovery Institute Fellow and one of the first 100 signers (now over 400) to their statement of scientific skepticism about Darwinism, I can tell you that our ranks are swelling and our case getting stronger all the time. Pieces like Alter's only show us and Newsweek's readers, the bankruptcy of the Darwinian paradigm.

Raymond G. Bohlin, Ph.D. President, Probe Ministries

I would like to make some additional comments here.

- 1. Alter magically proclaims that "One of the reasons we have fewer science majors is the pernicious right-wing notion that conventional biology is vaguely atheistic." How does he know that? Of course he just states it as a bald assertion, expecting us to just believe it because he says so. His claim might be true, but he is clearly trying to blame doubts about evolution for the U.S.'s perceived sputtering in science. Need a whipping boy? Try "right-wing fundamentalists." Some will believe that every time.
- 2. He says that offering ID as "an alternative to evolution in ninth-grade biology is a cruel joke." Nowhere has anybody made such a request. Even in Dover, PA, the disclaimer by the school board simply offers ID as something students might explore. It is not officially offered in the classroom as a competing theory. Discovery Institute itself maintains that ID is not ready for such treatment.
- 3. In the same paragraph, Alter says "ID walks like science and talks like science but, so far, performs in the lab worse than medieval alchemy." I guess that was supposed to sting.

What Alter doesn't realize is that in molecular and cell biology, in particular, the language of design is everywhere in describing the workings of the incredible molecular machines inside the cell. They just claim that natural selection produced them with no real attempts to explain how. And as a mechanistic theory, evolution should be able to. So in reality, ID is used all the time in biological research, even by evolutionists, you just can't call it that if you want your work to be published.

- 4. Alter drags the ever present Kenneth Miller into his discussion. He mentions, parenthetically, that Miller attends Mass every week. So what? It's a double standard to allow Miller's attendance at church serve to further his credibility when my association with a Christian ministry has been used to discredit my testimony and somehow claim that my scientific reasoning is now suspect. Nobody ever mentions Miller's possible conflict of interest in his defense of evolution and criticism of ID. Kenneth Miller is coauthor of a well-known high school biology textbook that strongly promotes evolution as the grand unifying principle of biology. If evolution is dethroned, he loses money and his reputation. How come his reasoning isn't compromised?
- 5. Alter claims that science and religion are not at odds over evolution. Fine. But science is at odds with the Darwinian mechanism and there have always been doubts. As I said in my letter to the editor, the scientific case for ID only grows stronger and the debate is here to stay. Let them keep making the science vs. religion argument and the more thoughtful and reasonable among us will see through the smoke screen and will give ID a chance. That's all we ask.
- 6. Alter makes it seem that the appeal to science standards and school boards is a last ditch effort when all else has failed. In reality, these are true grassroots efforts by people who have read the books and want the truth taught to their children. Many have been frustrated for years that their

kids are exposed to an evolutionary filibuster in school and are encouraged that there is a growing scientific revolt in support of their concerns. The *Time* article mentions that 30% of surveyed biology teachers felt pressure to give evolution a short treatment by concerned parents. What about the greater than 50% of students (far more vulnerable to pressure than adult teachers) who have felt bullied by evolution for decades?

7. All this negative publicity is actually a good thing in the long run. As long as the silly arguments are answered, we gain new adherents with every wise-cracking, arrogant article. Why? Because reasonable people see through all the fuss eventually and realize that something funny is going on. After that they read Behe, Dembski, Meyer, Gonzalez, Richards, Nelson, Wells, Thaxton, Bradley, and other ID leaders and it all begins to come together. May our tribe increase!

#### See Also:

- Mere Creation: Science, Faith and Intelligent Design
- <u>Dr. Bill Dembski's response to Steven Pinker's Assault on</u>

  ID in *Time* on his blog, "Uncommon Descent"
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