

Redesigning Humans: Is It Inevitable?

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



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

The People Are Restless

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

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



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

have been remarkably harnessed.

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

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

I recently spent several days at the United World College in New Mexico developed by the late Armand Hammer, one of several upper high schools around the world for the best and brightest. The occasion was a student-led conference organized for discussing the ethics of human genetic engineering and cloning. Three other invited guest speakers and I spent two days with the 200 students from around the world and the UWC faculty and staff.

About fifty of the students were from a variety of backgrounds from here in the U.S., and the other 150 were from almost ninety countries. Their knowledge and perspectives on human genetic engineering ran from those who saw few problems and were perplexed by those with reservations to those who held all such technologies at arm's length and couldn't understand why anyone would want to do such things.

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

Is There a Posthuman Future?

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

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

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

One couple from Wyoming had fourteen embryos created by in vitro. Seven were male, seven were female. They chose three females to be implanted to ensure their fourth child was a

girl after three boys. The technique is virtually 100% effective. Less efficient sperm selection techniques are only 91% effective for girls and only 76% effective for boys.^{2} But should we be selecting the sex of our children?

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

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

What’s So Wrong With Tinkering With Our DNA?

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

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

But this does not deter some because they already view the embryo, before fourteen days after conception, as little more than reproductive cells and not yet worthy of being declared human. If this definition holds, embryos can be wasted as long

as a supply of human eggs is readily available. In addition to preimplantation genetic diagnosis (PGD) for sex selection and selection of embryos that are free of cystic fibrosis, Tay Sachs, hemophilia, and other genetic diseases, other genetic technologies are on the near horizon.

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

Genetic futurist Gregory Stock summed it up when he said, "Breakthroughs in the matrixlike arrays called DNA chips, which may soon read thirty thousand genes at a pop; in artificial chromosomes, which now divide as stably as their naturally occurring cousins; and in bioinformatics, the use of computer-driven methodologies to decipher our genomes—all are paving the way to human genetic engineering and the beginnings of human biological design."[\[4\]](#)

Some may scoff at these projections, but people seem quite willing around the world to consider taking advantage of technologies that can genetically enhance themselves or their offspring. "In a 1993 international poll, Daryl Mercer, director of the Eubois Ethics Institute in Japan, found that a substantial segment of the population of every country polled said they would use genetic engineering both to prevent disease and to improve the physical and mental capacities inherited by their children. The numbers ranged from 22 percent in Israel and 43 percent in the United States to 63 percent in India and 83 percent in Thailand."[\[5\]](#) So what's the problem?

What's Our Next Step?

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

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

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

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

In regard to genetic engineering, we are easily swayed by appeals to eliminate genetic diseases without considering how difficult it is to delineate between curing genetic disease and producing genetic enhancements. James Watson, co-discoverer of the structure of DNA and Nobel Laureate, exposes our difficulty with two penetrating statements. Concerning

curing genetic disease he said, "What the public wants is not to be sick and if we help them not to be sick, they'll be on our side."[{6}](#)In another context Watson would have left most people dead in their tracks when he said, "No one really has the guts to say it, but if we could make better human beings by knowing how to add genes, why shouldn't we?"[{7}](#)

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

How Will the Church Be Challenged?

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

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

Kass sees that our efforts to redesign humans challenge our very dignity and identity as human beings. If parents have constructed the best child for them using the best available technology they can afford, are they still parents, or creators and owners with additional rights and privileges? A

child becomes a commodity to be designed, manufactured, and even sold. Love and nurture will turn to management and stimulation.

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

In my travels I have found the church to be largely unaware of how close we are to Stock's vision of redesigning humans. Within a few short decades our children will be pressured to alter their children genetically to keep up with society. Scientific research may well make use of human embryos as matter of fact research subjects. This may likely extend to developing fetuses, and it will all in the name of furthering health and eliminating disease.

How will we react? The Barna Research Group tells us over and over again that the Christian community does not think or act in an appreciatively different manner than society at large. That means these genetic technologies will find their way into the church. There will be a new source of discrimination to deal with. No longer will churches be segregated by economic status and race but by genetic pedigree as well.

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

Notes

1. Gregory Stock, *Redesigning Humans: Our Inevitable Genetic Future* (New York: Houghton Mifflin, 2002).
2. Claudia Kalb, "Brave New Babies," *Newsweek*, 26 January, 2004, 45-53.
3. Stock, 197.
4. *Ibid.*, 13.
5. *Ibid.*, 58.
6. Quoted in Leon Kass, *Life, Liberty, and the Defense of Dignity: The Challenge of Bioethics* (San Francisco: Encounter Books, 2002), 7.
7. Quoted in Stock, 12.
8. Kass, 8.

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Dr. Ray Bohlin Presents "Natural Limits to Biological Change"

Discovery Institute's *Dallas Conference on Science and Faith* (January 22, 2022) featured Probe VP and Discovery Institute Fellow Dr. Ray Bohlin's breakout session on his book *The Natural Limits to Biological Change*.

Read Dr. Bohlin's article: [The Natural Limits to Biological Change](#)

His PowerPoint slides can be accessed [here](#).

PowerPoint slides in a PDF document are [here](#).

Probe Survey 2020 Report 5: Sexual Attitudes and Religion vs. Science

Steve Cable continues his analysis of Probe's 2020 survey of American religious views moving over to consider their response to sexual mores of today and how they navigate religion and science.

The previous reports on Probe Survey 2020 were primarily focused on religious beliefs and practices. In this report, we will look at how these beliefs impact Americans as they deal with sexual issues and with navigating the relationship between religion and science. In general, the survey results confirm a continuing degradation in Americans', and particularly Born Agains', view of sex within a heterosexual marriage. We find that fewer than one in five Born Again Protestants affirm a biblical view in this area. On the other hand, Americans still tend to consider religious views at least as important as scientific positions in establishing their beliefs.

American Sexual Attitudes and Behaviors

We asked four questions regarding sexual attitudes and

behaviors in this survey.

1. Sex among unmarried people is always a mistake: from Agree Strongly to Disagree Strongly

2. Viewing explicit sexual material in a movie, on the internet, or some other source is:

- a. To be avoided
- b. Acceptable if no one is physically or emotionally harmed in them.
- c. A matter of personal choice
- d. Not a problem if you enjoy it
- e. Don't know

3. Living with someone in a sexual relationship before marriage:

- a. Might be helpful but should be entered into with caution.
- b. Just makes sense in today's cultural environment.
- c. Will have a negative effect on the relationship.
- d. Should be avoided as not our best choice as instructed by God

4. People attracted to same sex relationships are:

- a. To be loved and affirmed in their sexual choices.
- b. To be avoided as much as possible.
- c. To be accepted while hoping they realize there is a better way.
- d. To be loved and told God's truth regarding our sexual practices.

First, let's see how the different religious affiliations impact the answers to these questions.

Sex Among Unmarried People

First, let us establish the biblical standard for sexual relations outside of marriage. Is there clear teaching on this topic? Consider Jesus' discussion in the Sermon on the Mount where He said, "You have heard that it was said, '**Do not commit adultery.**' But I say to you that whoever looks at a woman to desire her has already committed adultery with her in his heart."[\[1\]](#)

In 1 Thessalonians 4:3, Paul writes, "For this is God's will: that you become holy, that you keep away from sexual immorality." And then in 1 Peter 2:11, Peter writes, "I urge you to abstain from the passions of the flesh, which wage war against your soul." It is very clear that the biblical standard calls for all sexual relations to occur within a marriage between one man and one woman.

✘ Results from the first question are plotted in Figure 1. As shown, here and in the next three graphs, we will look at those ages 18 through 29 next to those ages 40 through 55 to see if there are differences based on age. If there is a trend or variation seen in the 30 through 39 age group, then that one is also shown as seen for Born Again Protestants in Figure 1.

The graph shows the older group of Born Again Protestants is much more likely to Strongly Agree that fornication is always a mistake than the youngest group, dropping from almost one half to a little over one quarter, 46% to 29%. **Over two thirds of Younger Born Again Protestants have adopted the common view of the culture** that sex and marriage are not necessarily related. Note that even among the older group, **less than half of them strongly agree that sex outside of marriage is always a mistake.**

Looking across other religious affiliations, we see that the vast majority said they Disagreed or Strongly Disagreed with

this statement{2}. They generally believe that sex outside of marriage by unmarried people is not an issue. This is particularly true of the Unaffiliated with close to 90% (nine out of ten) disagreeing.

How have these views changed among born again young adult individuals over the last decade? Looking at the GSS survey from 2008, we find that over one in three (37%) Born Again Christians ages 18 through 29 agree with the statement, “If a man and woman have sex relations before marriage, I think it is always wrong.” Now in 2020, we find that over one quarter (27%) of Born Again Christians agree that it is always wrong. Although the questions asked were not identical, they are close enough to indicate that the drop of ten percentage points is a significant decline in young adult, Born Again Christians who take a biblical position on sexual activity outside of marriage.

Pornography.



The second question deals with views on the acceptability of viewing pornographic material. What does the Bible tell us about feeding our minds with sexually immoral material? Jesus tells us in Matthew 15:19, “For out of the heart come evil ideas, murder, adultery, sexual immorality, theft, false testimony, slander.” We are warned in 1 Corinthians 6:18, “Flee sexual immorality! Every sin a person commits is outside of the body but the immoral person sins against his own body.” And further in Ephesians 5:3, “But among you there must not be either sexual immorality, impurity of any kind, or greed, as these are not fitting for the saints.” Clearly, avoiding sexual immorality in all forms includes avoiding explicit sexual material.

The results are shown in Figure 2. Once again, we see that Born Again Protestants are much more likely to say that we should avoid exposure to such material. Both the younger group and the older have more than 50% who say it is “to be avoided.” However, the data also shows over four out of ten

Born Again Protestants believe it is usually okay. Given what we know about the negative effects of [pornography](#) on healthy living and relationships, this result is surprising.

All the other religious affiliations have only a small percentage of people who think that explicit sexual material should be avoided. Only about one in five Other Protestants and Catholics affirm that pornography is to be avoided. Once again, the Unaffiliated lag those affiliated with some religion having only about one in twenty (5%) that think pornography should be avoided.

For those who are not Born Again Protestants, around 10% to 20% say that such material is okay if no one is hurt in them. These people fail to realize that the person being hurt by these materials is themselves and their loved ones. More surprisingly, the vast majority of these people selected “a matter of personal choice” or “not a problem if you enjoy it,” implying that if people are shown being harmed in this pornographic material, that is perfectly okay if you enjoy it or want to put up with it.

Living Together Before Marriage

What does the Bible tell us about living in a sexual relationship before marriage? In Colossians 3:5, Paul states, “So put to death whatever in your nature belongs to the earth: sexual immorality, impurity, shameful passion, evil desire, and greed which is idolatry.” The current philosophy of “try before you buy” is popular but totally contrary to biblical instruction for a rich, fulfilling life. This philosophy clearly “belongs to the earth.”

✘ The third question examines views on whether it is a good thing to live together in a sexual relationship before committing to marriage. The results are summarized in Figure 3. This is another question where Born Again Protestants show a significant difference based on age. The older group, 40

through 55, shows almost 60% who say that it should be avoided as instructed by God. The younger group, 18 through 29, shows only 40% with the same viewpoint. Across all age ranges only about one half of Born Again Protestants say that this practice should be avoided. So, even among this group, over half believe that it is okay and might be helpful.

Once again, this question reveals a stark difference between Born Again Protestants and all other religious affiliations. Other Christian groups show **much fewer** than one in five adherents who believe this practice should be avoided. And we see the Unaffiliated lead the other viewpoint, with about nine out of ten of them saying the practice “might be helpful” or “makes sense in today’s culture.”

Same Sex Relationships.

The fourth question deals with how people react toward those who profess to have a sexual attraction towards those of the same gender. What does the Bible say about same sex relationships? Let’s consider the instruction from 1 Corinthians 6:9b-11, “Do not be deceived! The sexually immoral, idolators, adulterers, passive homosexual partners, practicing homosexuals, thieves, the greedy, drunkards, the verbally abusive, and swindlers will not inherit the kingdom of God. Some of you once lived this way. But you were washed, you were sanctified, you were justified in the name of the Lord Jesus Christ and by the Spirit of our God.”

The verse above tells us two things. First, that someone who is given over to homosexual activity (like those given over to idolatry, sexual immorality, and greed) are not true followers of Christ. Even in Paul’s era, many were apparently saying they would inherit the kingdom of God and so Paul begins the statement by saying “Do not be deceived.” But it also clearly states that such a one can be washed, sanctified and justified in Jesus Christ. As Christians, we should love them and tell them the truth that God has a better way for

their life.

Note that our question does not distinguish between those experiencing same sex attraction and those actively involved in living out their attraction through homosexual activity. Both categories of people need to be loved and told the truth.

The results for this question are summarized in Figure 4. As shown, we see some difference based on age for Born Again Protestants. However, it is not as pronounced as for the question on fornication above. Looked at as a group between age 18 and 55, less than one half of Born Again Protestants selected loving them and telling them what the Bible says about homosexual practices.

Once again, all other groups are much less likely to take a biblical position. However, when we add in the answer about “accepting them while hoping they find a better way”, the other religious groups (excluding the Unaffiliated) show almost four in ten who desire them to find a better way.

Note that Other Protestants are most likely at 20% (about one out of five) to say they would try to avoid people attracted to the same gender.

Combining Questions for Born Again Protestants.

How many Born Again Protestants take a clear biblical view of all four questions concerning sexual attitudes and behaviors? Results are shown in the adjacent chart. The chart begins with results by age for the first question concerning fornication. As you move to the right, additional questions are added to the questions already addressed to the left. Thus, the bars on the right include those who took a biblical position on all four of the questions.

☒ Clearly, ones in the older group are more likely to take a biblical view on sexual behavior. In fact, on the far right, we see that those 40 to 55 are twice as likely as those

18 to 29 to hold to a biblical view. However, more important, is that over 80% of the younger ages and over 75% of the oldest ages do not hold to a biblical view on these combined topics regarding sexual behavior.

To understand how disturbing these results should be, consider **Born Again Christians with a biblical view on sexuality as a percentage of the entire United States population. The results are 2% for 18 through 29, 3% for 30 through 39, and a whopping 6% for 40 through 55.** In other words, a slim remnant of adults in America hold to a biblical view of sexuality. A secular view promoting no relationship between sexual behavior and marriage and no limits on satisfying one's lusts currently dominates our national thinking.

Don't Do What You Say You Will Do.

We will address this topic more fully under Topic 10 but it is relevant to thinking about the Combining Question topic above. We asked this question:

When you are faced with a personal moral choice, which one of the following statements best describes how you will most likely decide what to do?

One of the answer choices is "Do what biblical principles teach."

Almost half (47%) of Born Again Protestant young adults (18 through 39) selected that answer. They would follow biblical principles in making moral decisions. Yet as just seen, only about 15% of Born Again Protestant young adults selected biblical principles on all four questions regarding sexual behaviors.

Although we can't be certain, it appears that many Born Again Protestant young adults either don't know what topics are covered under moral choices OR they don't know what biblical principles teach OR both. Clearly, almost half of Born Again

Protestant young adults think that they are choosing to think biblically about moral choices, but most of them are not living the way they think they are.

Responding to These Results on Sexual Attitudes

All of the results presented above show that a large majority of young adult, Born Again Protestants do not adhere to a biblical position on topics related to sexual morality. The data also shows that when Born Again Protestants enter the world of higher education and secular careers, they are surrounded by an even greater majority of people who believe that pretty much anything is acceptable in the area of sexual relations. Among other conclusions, we can be sure that these two data points tell us that while young adults were involved in church as teenagers, they were not adequately taught the basics of Christian doctrine in the area of sexuality and did not receive a good explanation as to why the Christian attitudes are much, much better than the free license rampant in our society today.

Christian teaching on sexuality must occur more frequently from the pulpit, in bible studies, in small group times. If we think that parents as the only source of information are sufficient to set up young Christians to be an example of godly sexuality, the data says "not so fast." However, we do not equip parents to discuss these matters with their children. We cannot allow their peers to set the bar on acceptable behavior.

American Attitudes Concerning Science and Religion

We included three questions probing people's views on the relationship between science and religion. The first question relates to any apparent conflicts between current scientific theories and their beliefs based on their religion. From the answers, one can tell whether the respondent puts more

credence in current scientific theories or in their religious beliefs. The question is:

Question #1: When apparent conflicts appear between science and religious teachings, one should:

1. Ignore science, accepting that when science learns more it will agree with your religion.
2. Examine your religious teachings to determine if the scriptures are in conflict or it is just someone's interpretation of the scriptures that conflict.
3. Change your religious views to align with current scientific views.
4. Abandon your religion as being false.

The first two answers are consistent with a Basic/Enhanced Biblical Worldview, reflecting 1) a view that their scripture is informed by a higher source of truth than simple science can draw upon, 2) a recognition that generally accepted scientific viewpoints have often changed over time, and 3) on the type of scientific questions being addressed here, there are in most cases a variety of theories supported by different groups of scientists. The second answer includes the possibility that the person's holy scriptures do not directly address the topic at hand, but that some religious leaders have inferred a position on the topic from their interpretation of scriptures.

The second two answers, i.e. 3 and 4, reflect a view that scientific teaching communicates truth that religious teachings are unable to counter. The third answer results in a religious viewpoint that will vary over time as scientific ideas gain or fall out of favor in the scientific community.

As shown in the figure, the majority of American young adults do not accept that science is infallible (by supporting answers 3 or 4). Less than 10% of Born Again Protestants selected one of these answers. And even among the Unaffiliated, less than half of them selected an answer where scientific theories trump other sources of beliefs.

At the same time, those who selected a view that ignores science all together (answer 1) were a small minority as well. Less than one in five (20%) of the Born Again Protestants and slightly over one out of ten for the other religious groups.

So well over 50% of all religious groups selected answer number 2, showing a willingness to go against science but also a desire to meld the views of science into their religious views. We did not ask a follow up question as to what they would do if they determined there was an unresolvable conflict with the current position supported by most scientists. There are not many unresolvable conflicts if one is willing to adopt a position supported by a reputable minority of scientists, e.g. intelligent design.

Question #2: My understanding of human origins is the result of:

1. Using the Bible alone with no regard for the findings of science.
2. Using science to better understand what the Bible teaches us about origins.
3. Not sure
4. Accepting a completely naturalistic view, i.e. no intelligence involved in the process.

Note these answers follow a similar pattern to those of the first question, but now they are applied to a specific question where many people assume there is no meeting ground

between science and religion.

The answers are shown in the adjacent graph. On this more specific question, the percentage of each religious group that is going to look at the Bible alone for their understanding hovers around 30% for all religious groups but plummets to under 8% for the Unaffiliated.

Conversely, only the Unaffiliated show more than three out of ten who “accept a completely naturalistic view” (choice #4). Born Again Protestants show only about one out of eight who select such a view. This result is amazing given the concerted push by some educators to force our students to accept a completely naturalistic view of creation. However it is consistent with the current state of the research on the origins of man, including new reports from 2021. [\[3\]](#)

The majority for each group of people selected “Not sure” or said they would use science to help them better understand what the Bible teaches.

Question #3: All real scientists believe that science is the only source of real truth.

The potential answers ranged from Strongly agree to Strongly disagree and included Neither agree or disagree.

First note that if we strictly define real scientists as individuals meeting these qualifications—1) a Ph.D. in a scientific field, 2) actively involved in the field, and 3) published in reputable scientific journals—we will find many scientists who agree that there are other sources of truth outside of science. So, we can say with confidence that **the statement in question #3 is objectively, verifiably not true**. However, there are certainly some believers in scientism [the belief that science is the only way to know ultimate truth] who claim the statement is true. They accomplish this trick by claiming that anyone who does not believe that science is the only source of real truth cannot by definition be a real

scientist.{4} In other words, they use circular reasoning.

But there is certainly a movement to instill scientism as the favored viewpoint in society.{5} How successful are these proponents of scientism? Looking at the answer shown in the adjacent chart will throw some light on this question.

We would like to see the answer: Strongly Disagree. This answer aligns with the objective truth discussed above. But what we find is that only one out of five (20%) of Born Again Protestants profess this view. Among Other Protestants and Catholics only about one out of twenty (5%) profess this view. Adding some uncertainty by adding those who say they Disagree, increases those amounts to two out of five (40%) for Born Again Protestants and one out of five (20%) for Other Protestants and Catholics.

Those who agree with the statement range from one out of four (25%) Born Again Protestants up to nearly one half (almost 50%) of Other Protestants and Catholics. Clearly, the proponents of scientism have done a good job of skewing our understanding of who scientists are and what they believe.

Combining the Questions

✘ What do the results look like when we combine these questions? In our opinion, there are a number of different answers that could be consistent with a biblical worldview. Starting with the strictest view of relying on the Bible rather than science and then adding in those who would look at the results from science to obtain a clearer understanding of what the Bible teaches or those areas where the Bible is silent. Then, we add in their view on scientism which as already discussed is demonstrated by a long list of scientists who disagree to be false, thus being a source of strong disagreement.

The results from this comparison are shown in the adjacent figure. The first thing to notice is that the percentage of

Born Again Protestants who take a more fundamental position, i.e. science should be ignored as a source of information, is low for one question and goes down to only a few percentage points when all three questions are combined.

The right hand side of the chart considers all combinations of answers that reflect a commitment to biblical truth above current scientific theories combined with a willingness to consider what science has to offer. As shown, the combination of the first two questions has a large percent of Born Again Protestants, ranging from 55% for the youngest age group and growing to over 65% for the older age group. Since only a minority of Born Again Protestants stated Strongly Disagree that all scientists are adherents of scientism, when we add that question to the mix on the far right, we see less than one in five take a Biblical position on all three.

Effect of a Basic Biblical Worldview.

A natural question to ask is, “Does having a Basic Biblical Worldview correlate with having a biblical view on these science issues?” We can look at this question by comparing Born Again Protestants with a Basic Biblical Worldview with Born Again Protestants without a Basic BWV. The results are shown in the adjacent figure.

At a top level, we can see a correlation between a Basic Biblical Worldview and a biblical understanding of the relationship with science. This correlation appears to be strongest with those ages 18 through 29. We see that those with a Basic Biblical Worldview are about twice as likely to have a biblical view on all three of the questions related to science.

Responding to These Results on Science and Religion

As we can see from the first two science questions above, the majority of Americans do not buy into the idea that the only real source of truth is science. They don't believe that

scientific positions automatically take precedence over their religious beliefs. Perhaps one factor supporting this stance is an understanding that scientific hypotheses and positions have changed fairly often over the years, particularly in the areas of the origin of life and the role of evolutionary processes on our current bounty of life forms. Certainly, it is not the public school system which has attempted to promote concepts which current day scientists studying the field do not support.

However, Americans do have a skewed view of scientism, with a vast majority believing that all real scientists support this religious concept. This position is a little surprising given that the view is demonstrably false.

In one area, sexual behavior, even American Christians have thrown out the teaching of the Bible. At the same time, they are resisting the call to make science the ultimate source of truth.

Notes

1. Matthew 5:27-28
2. There is also a small number of those answering Don't Know included in the number of those who do not state that they Strongly Agree or Agree Somewhat with the statement.
3. In March, Nobel Prize-winning physicist Brian Josephson declared that "intelligent design is valid science." In April, researchers writing in the journal *Current Biology* asked whether Darwin's "tree of life" should "be abandoned."
4. See for example: Daniel Dennett, *Breaking the Spell*, 2006.
5. See for example the book by J. P. Moreland, *Scientism and Secularism*, 2018.

Dr. Ray Bohlin Presents “The Return of the God Hypothesis”

At our Probe Live Event on September 18, 2021, Probe Vice-President and Discovery Institute fellow Dr. Ray Bohlin presented fascinating evidence for Intelligent Design from Dr. Stephen Meyer’s book *Return of the God Hypothesis*.

Read Dr. Bohlin’s article providing an overview of the book: [Return of the God Hypothesis for Regular People](#)

Atheist Myths and Scientism

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

A Two-Pronged Attack Against Christianity



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

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

1. Fabricating myths around the premise that Christianity and modern science are enemies of one another and have been so since the advent of modern science, and
2. Promoting the philosophy of scientism as the only way to view science.

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

whereby the myths pass as accepted wisdom.”{1}

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

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

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

Myths about Christianity and Science

Atheists want to create stories to demonstrate that Christians

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

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

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

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

Another myth exploded by Keas is that "Copernicus demoted humans from the privileged 'center of the universe' and thereby challenged religious doctrines about human importance."[\[7\]](#) In fact, Copernicus as a Christian did not consider his discovery that the earth orbited the sun a

demotion for earth or humans. What Copernicus saw as unveiling the mysteries of God's creation over time began to be pictured as a great humiliation for Christians. In the 1950s some scientific writers began using the term "the Copernican principle" to refer to the idea "that the Earth is not in a central, specially favored position"[{8}](#) in the cosmos. As one Harvard professor has noted, "This is the principle of mediocrity, and Copernicus would have been shocked to find his name associated with it."[{9}](#)

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

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

Methodological Naturalism: A Farce

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

knowledge of reality?

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

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

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

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

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

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

In contrast, those supporting theistic evolution appear to do so in order to conform to the methodological naturalism of their peers. They claim to believe that God does intervene in nature through acts such as the miracles of Jesus and His resurrection. But they claim that God did not intervene in the processes leading up to the appearance of mankind on this planet. In my opinion, they take this stance not because the

evidence demands it, but because methodological naturalism does not allow it. As Moreland opines, “Methodological naturalism is *one bad way* to put science and Christianity together.”[\[14\]](#)

Things Science Cannot Explain / God of the Gaps

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

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

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

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

Something either does or does not exist.

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

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

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

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

These five important questions can never be answered if

scientism's flawed premise were true. However, Christian theism answers each of these questions and those answers are true if God is the real creator of the universe.

Integrating Christianity and Science

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

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

One area of significant interaction is the question of how this universe came to exist in its current state. How one views that interaction (i.e. as adversarial or as complementary) depends on whether they are clinging to the unsupported myth of unguided evolution or to the new science of intelligent design. As Moreland states, "Science has done more to confirm the Christian God's existence than to undermine it, and science has provided little or no evidence against belief of theism. Science has, however, raised challenges to various biblical texts, and Christians need to take those challenges seriously."[{20}](#)

Moreland suggests there are five ways to relate issues in science and Christian philosophy. Let's consider two of those methods. One is the complementarity model. In this model, two disciplines are addressing the same object or feature but from

different, essentially non-overlapping perspectives. “Neither one purports to tell the whole story, but both make true claims about reality.”[\[21\]](#) This is the model used by advocates of theistic evolution who take as gospel the latest claims of evolutionary science while saying of course God kicked off the whole process including us in His plan for the universe.

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

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

1. Make sure there is not a reasonable interpretation of the Bible that resolves the tension.
2. There is a band of academically qualified scholars who are unified in rejecting the view held by a majority of the relevant experts. In this way, we know that there are people who are familiar with the details of the majority view, who do not believe that it is true.
3. There are good non-rational explanations for why the expert majority holds the problematic view. For historical,

sociological, or theological reasons, the majority is not ready to abandon their position rather than because their evidence is overwhelming. “For example, the shift from creationism to Darwinism was primarily, though not exclusively, a shift in philosophy of science.”[\[22\]](#)

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

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

Notes

1. Michael Keas, *Unbelievable: 7 Myths About the History and Future of Science and Religion*, ISI Books, 2019, 2.
2. Rodney Stark, *How the West Won: The Neglected Story of the Triumph of Modernity*, ISI Books, 2014 p. 304, 315.
3. J. P. Moreland, *Scientism and Secularism: Learning to Respond to a Dangerous Ideology*, Crossway, 2018, 26 and 29.
4. Ibid., p. 23.
5. Ibid., p. 55.
6. Stark, p. 76.
7. Keas, p. 4 and Chapter 6.
8. Herman Bondi, *Cosmology*, Cambridge University Press, 1952.
9. Owen Gingerich, *God’s Universe*, Belknap Press, 2006.
10. Sagan, 1980 *Cosmos* TV series, episode 3.

11. Kepler, letter to Herwart von Hohenburg, April 9/10, 1599.
12. Moreland, p. 52.
13. Ibid., p. 131.
14. Ibid., p. 159.
15. Ibid., p. 138.
16. Ibid., p. 146.
17. Ibid., p. 151.
18. J. L. Mackie, *The Miracle of Theism*, Oxford, 1982, p. 115.
19. Moreland, p. 31.
20. Ibid., p.174.
21. Ibid., p. 184.
22. Ibid., p. 192.

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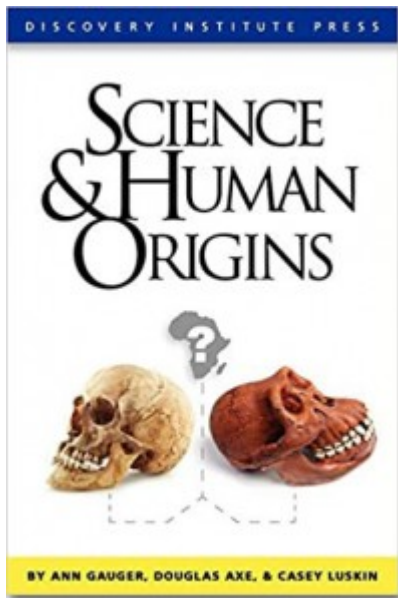
Science and Human Origins

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

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

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





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

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

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

The usual series of fossils links together Lucy, the australopithecine closest to humans and Turkana Boy (*Homo*

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

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

The Earliest Fossils Leading to Humans

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

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

A second fossil known as "Orrorin" (*Orrorin tugenensis*) or "original man" in a local Kenyan language was designated as

the earliest human link in 2001.^{2} But it was little more than a few bone fragments from an arm, thigh, lower jaw and a few teeth. As usual, there were some saying that Orrorin walked on two feet and others who said there isn't enough information to determine how this organism moved. Another fossil found on the island of Sardinia is truly an ape but had some indications that it too was bipedal. But *Oreopithecus* is thought to have arrived at its bipedal gait independently. This would clearly indicate that just because an ape-like fossil had bipedal adaptations doesn't mean it was ancestral to humans.

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

From "Lucy" to "Turkana Boy"

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

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

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

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

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

DNA Doesn't Lie

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

In preparation for BioLogos he published a book titled *The Language of God*.^{4} In this book, Collins presents a two-fold line of evidence that humans and chimps evolved from a common ancestor. First he appeals to what are known as repetitive elements in our DNA. All mammalian genomes have relatively short sequences that can be very specific to species and groups of species, spread throughout the genome. It appears as if these sequences make copies of themselves and randomly insert the copy elsewhere in the genome. These repetitive elements are frequently found in the same place in the genome in distant species such as mice and humans. These are referred to as Ancient Repetitive Elements (ARE). These AREs are assumed to have no functional significance in the organism. This renders them as what is referred to as "selfish DNA" which exists only to survive and reproduce.

Some AREs are found in the same chromosomal location in mice and humans as well as humans and chimps. This sure seems like evidence of common ancestry, as Collins claims. But the assumption I just mentioned, that these sequences have no

function, has been widely disproved in just the last ten years. As a result of the Human Genome Project that Collins led, we can now search all DNA sequences for some kind of function. Relying on work published by Richard Sternberg, Luskin lists twenty newly discovered functions for different types of repetitive elements in mammalian and human genomes. [\[5\]](#)

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

How Many Humans at the Start?

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

Gauger investigates in detail the most variable gene in humans. This gene codes for a protein involved in the immune system. One section of this gene is what geneticists call "hypervariable." Evolutionist Francisco Ayala and others researched this gene in the mid-1990s. Ayala's conclusion was that the original human population that separated from the line that evolved into chimps contained at least 32 copies of the gene in its population. Each of us has only two copies of

each gene, so 32 copies requires at least 16 people. But since, over time, different gene copies are lost, Ayala estimated a human population of at least 10,000 individuals with an average closer to 100,000.

Gauger points out that Ayala misused several assumptions. He assumed a small mutation rate and he assumed no selection. When Gauger corrects for these errors and examines the studies of others, she determines that the equations, when the proper assumptions and mutation rates are used, the original human population could have had as few as 4 copies of this gene. Let's see, two copies per person, four copies, only needs two people. How about that!

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

Notes

1. Gauger, Ann, Douglas Axe, and Casey Luskin, *Science and Human Origins* (Seattle: Discovery Institute Press, 2012).
2. Ibid., p. 51.
3. Ibid., p. 65-70.
4. Francis Collins, *The Language of God: A Scientist Presents Evidence for Belief* (New York: Free Press, 2006).
5. Gauger, Ann, et al., *Science and Human Origins*, p. 87-88.

Darwinism: A Teetering House of Cards



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

The Origin of Life: A Mystery

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

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

address areas where Darwin's grand idea is weaker now than 150 years ago. As Bethel states, "Today, it more closely resembles a house of cards, built out of flimsy icons rather than hard evidence, and liable to blow away in the slightest breeze."[\[1\]](#) It is not just critics who recognize this weakening. In 2016, the Royal Society in London convened a meeting to discuss "calls for revision of the standard theory of evolution."[\[2\]](#)



Four areas where Darwin hoped future work would support his

theory will be examined. The first area is the origin of reproducing beings.

Darwin only hoped that life may have originated in a “warm little pond.” But as one scientist states, “The origin-of-life field is a failure—we still do not have even a plausible coherent model, let alone a validated scenario, for the emergence of life on earth.”[\[3\]](#)

Darwin assumed the first reproducing cells were very simple. In truth, the simplest cells are composed of impressively complex machines which could not have arisen directly from inorganic components. But there are no known simpler life forms. As Michael Behe commented, “The cell’s known complexity has increased immeasurably in recent years, and points ever more insistently to an intelligent designer as its cause.”[\[4\]](#)

The probability of even one of the amino acids necessary for life appearing by random mutations is effectively zero even given billions of years. As Doug Axe writes, “(Examining how) accidental evolutionary processes are supposed to have invented enzymes without insight, we consistently find these proposals to be implausible.”[\[5\]](#)

Another professor states, “Those who think scientists understand the issues of prebiotic chemistry are wholly misinformed. Nobody understands them. . . . The basis upon which we . . . are relying is so shaky we must openly state the situation for what it is: a mystery.”[\[6\]](#)

Facing insurmountable odds against life appearing, some materialists propose an infinite number of parallel universes.[\[7\]](#) With infinite chances, even the most unlikely events could occur. But, as Axe points out, “The biological inventions that surround us (are) fantastically improbable, with evolution explaining none and the multiverse hypothesis explaining only those absolutely necessary for wondering to be possible, . . . this hypothesis fails to explain what we

see.”[{8}](#)

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

An Example of Macro-evolution: Still Searching

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

Let’s begin with fossil evidence.

The number of fossils studied has blossomed over the last 150 years. All the types of species which exist today appear in the fossil record over a relatively short period of time.[{9}](#) And, in most cases, with no transitional forms between them undermining Darwin’s theory. As science historian Stephen Meyer concludes, “As more . . . fossils are discovered (failing) to document the great array of intermediate forms, it grows ever more improbable that their absence is an artifact of either incomplete sampling or preservation.”[{10}](#)

And evolution proponent Stephen Gould wrote, “The extreme rarity of transitional forms in the fossil record persists as the trade secret of paleontology. The evolutionary trees . . . have data only at the tips and nodes of their branches; the rest is inference.”[{11}](#) *Nature* editor Henry Gee put it this way: “To take a line of fossils and claim that they represent a lineage is not a scientific hypothesis that can be tested, but an assertion that carries the same validity as a bedtime

story.”{12}

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

Let’s continue by looking at experimental evidence.

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

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

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

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

The Challenge of Irreducible Complexity

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

complexity and functional coherence say yes.

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

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

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

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

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

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

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

DNA and Molecular Science Muddy the Scenario

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

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

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

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

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

This disconnect from recent gene research is not limited to a few cases. As reported in 2012, “incongruence between (trees) derived from morphology . . . , and . . . trees based on different subsets of molecular sequences has become pervasive.”[\[24\]](#)

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

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

But recent research shows at least eighty percent of the human genome contributes. As Wells reports, “The evidence demonstrates that most of our DNA is transcribed into RNA and that many of those RNAs have biological functions. The idea that most of our DNA is junk, . . . is dead.”[\[27\]](#)

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

A Philosophy Props Up Its Poster Child

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

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

Wells suggests, "Priority is given to proposing and defending materialistic explanations rather than following the evidence wherever it leads. This is materialistic philosophy masquerading as empirical science, . . . zombie science." [{28}](#)

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

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

Bethel points out, "If our minds are . . . accidental products

of a blind process, what reason do we have for accepting materialist claims as true?"[\[30\]](#) After all, our minds are selected to improve our survivability, not to discern what is true.

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

Axe claims, "The religious agenda is the enemy that threatens science. . . . Everything that opposes the institutionalized agenda is labeled 'anti-science.'" [\[31\]](#)

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

In this review, we have seen

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

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

Notes

1. Tom Bethel, *Darwin's House of Cards: A Journalist's Odyssey Through the Darwin Debates*, Discovery Institute Press, 2017, page 20.
2. Ibid, page 20.
3. Eugene V. Loonin, *The Logic of Chance: The Nature and*

- Origin of Biological Evolution*, FT Press, 2011, page 391.
4. See Behe, back cover comment for Thomas E. Woodward and James P. Gills, *The Mysterious Epigenome* (Grand Rapids, MI: Kregel Publications, 2012).
 5. Douglas Axe, *Undeniable: How Biology Confirms Our Intuition That Life Is Designed*, HarperOne, New York, 2016, page 63.
 6. James Tour, "Animadversions of a synthetic chemist," *Inference* 2:2, May 19, 2016.
 7. Axe, page 227.
 8. Axe, page 230.
 9. Meyers and other quotes on the Cambrian.
 10. Stephen Meyer, *Darwin's Doubt*, New York, Harper Collins, 2014, page 70.
 11. Gould, *The Panda's Thumb*, page 181.
 12. Henry Gee, *In Search of Deep Time: Beyond the Fossil Record to a New History of Life*, New York: The Free Press, 1999, p. 32, 113-117.
 13. Soren Lovtrup, *Darwinism: The Refutation of a Myth*, New York, 1987, page 351.
 14. Bethel, page 45.
 15. Richard Lewontin, "Testing the Theory of Natural Selection," *Nature* 236 no. 5343, p. 181-182.
 16. Bethel, page 79.
 17. Darwin, *The Origin of Species*, 2nd ed., 1860, page 189.
 18. Axe, page 184.
 19. Gehring and Ikeo, "Pax6: mastering eye morphogenesis and eye evolution," *Trends in Genetics* 15, 1999, 376.
 20. James Schwartz, "Oh My Darwin!: Who's the Fittest Evolutionary Thinker of All?," *Lingua Franca* 9, no. 8 (1999).
 21. Axe, page 271.
 22. Wells, page 90.
 23. Wells, page .
 24. Liliana Davalos, Andrea Cirranello, Jonathan Geisler, and Nancy Simmons, "Understanding phylogenetic incongruence: Lessons from phyllostomid bats," *Biological Reviews of the Cambridge Philosophical Society* 87, 2012.
 25. Antonis Rokas, Dirk Kruger, and Sean B. Carroll, "Animal

evolution and the molecular signature of radiations compressed in time," *Science* 310, 2005.

26. Francis Crick, *What Mad Pursuit: A Personal View of Scientific Discovery*, New York, Basic Books, 1988, page 147.

27. Wells, page 128.

28. Wells, page 17.

29. Bethel, page 149.

30. Bethel, page 174.

31. Axe, page 54.

32. Bethel, page 161.

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Is Theistic Evolution the Only Viable Answer for Thinking Christians?

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

Francis Collins and Theistic Evolution

Dr. Francis Collins, recipient of the Presidential Medal of Freedom for cataloging the complete human DNA sequence, put forth his views on science and Christianity in his 2006 book, *The Language of God*[\[1\]](#). Could his theistic evolution view resolve the apparent conflict between modern science and the Bible? In this article, we will examine this belief and his arguments for it.



Collins grew up agnostic but became an atheist in his student years. At twenty six, he took on the task of proving Christianity false. Like many before him^{2}, this hopeless task resulted in accepting Christianity as true: Jesus as God in the flesh bringing us eternal life. In his role as a medical researcher into the genetics of man, he found himself dealing in a world where many questioned the validity of Christian thought as anti-science.

These conflicting forces led him to develop views reconciling the current positions of science and the truths of the Bible. As Collins states, "If the existence of God is true (not just tradition, but actually true), and if certain scientific conclusions about the natural world are also (objectively) true . . . , then they cannot contradict each other. A fully harmonious synthesis must be possible."^{3} Certainly, this statement is one we all should agree on if we can agree on which scientific conclusions are objectively true.

His resulting beliefs rest on the following premises^{4}:

1. God formed the universe out of nothingness 14 billion years ago.
2. Its properties appear to have been precisely tuned for life.
3. The precise mechanism of the origin of life remains unknown,
4. Once evolution got under way, no special supernatural intervention was required.
5. Humans are part of this process, sharing a common ancestor with the great apes.

6. But humans are unique in ways that defy evolutionary explanation, pointing to our spiritual nature.

Rather than interceding as an active creative force, God built into the Big Bang the properties suitable for receiving the image of God at the appropriate time. Purely random mutations and natural selection brought about this desired result. Being outside of time, God would know that this uninvolved approach would result in beings suitable to receive the breath of God.

The Argument for Theistic Evolution

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

Collins argues the Big Bang and the fine-tuning of this universe are clearly the work of God. After that, no intelligent intervention occurred, even though scientists have no idea how life began.[{5}](#) At some point, God intervened—first, by giving humans moral and abstract thinking, and second, by sending Jesus Christ to perform miracles, be crucified and resurrected, and bring us eternal life.

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

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

Collins wrote[{6}](#) that our DNA leads him to believe in common ancestry with chimpanzees and ultimately with all life. His conclusion is partially based on the large amount of "junk

DNA” similar across humans and other animals. If similar segments of DNA have no function, these must be elements indicating a common ancestry.

Subsequent research undermines this belief. “DNA previously dismissed as “junk” are . . . crucial to the way our genome works,. . . . For years,. . . more than 98% of the genetic sequence . . . was written off as ‘junk’ DNA.”^{7} Based on current research,^{8} almost every nucleotide is associated with a function. Over 80% of the genome has been shown to have a biochemical function and “the rest . . . of the genome is likely to have a function as well.”^{9} Collins agrees that his earlier position was incorrect.^{10}

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

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

Irreducible Complexity

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

ID researchers define it as: “[A] system of several well-matched, interacting parts that contribute to the basic function, wherein the removal of any one of them causes the system to cease functioning. [It] cannot be produced directly by slight, successive modifications of a precursor system, because any precursor . . . that is missing a part is by definition nonfunctional.”^{11} A mindless evolutionary process cannot create a number of new, unique parts that must function together before creating any value.

However, Collins believes nothing is too hard for evolution

given enough time. He states, “Examples . . . of irreducible complexity are clearly showing signs of how they could have been assembled by evolution in a gradual step-by-step process. . . Darwinism predicts that plausible intermediate steps **must have existed**, . . . ID. . . sets forth a straw man scenario that no serious student of biology would accept.”[{12}](#)

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

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

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

God of the Gaps and *Ad Hominem* Attacks

Francis Collins states, “ID is a ‘God of the gaps’ theory,

inserting . . . the need for supernatural intervention in places its proponents claim science cannot explain.”{16}

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

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

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

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

Collins also states, “**No serious biologist** today doubts the theory of evolution.”{20} And, “ID’s central premise . . . sets forth a straw man scenario that **no serious student** of biology would accept.”{21} So, those differing with Collins

are not even serious students of biology. Collins ignores the over 800 Ph.D.s who signed a document questioning the ability of Darwinian theory to explain life.[{22}](#)

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

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

Perverting the Views of C. S. Lewis

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

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

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

theories as truth and reject ID.

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

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

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

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

Notes

1. Francis S. Collins, *The Language of God: A Scientist Presents Evidence for Belief* (New York: Free Press, 2006).
2. See for example, Josh McDowell's story in *Undaunted: One Man's Real-Life Journey from Unspeakable Memories to Unbelievable Grace*, Lee Strobel's story in *The Case for Faith*, and Viggo Olsen's story in *Daktar, Diplomat in Bangladesh*.
3. Collins, p. 169.

4. Collins, p. 200.
5. Collins, p. 90.
6. Collins, p. 109-142.
7. *UK Guardian*, September 5, 2012.
8. ENCODE is an acronym for the Encyclopedia of DNA Elements project.
9. Casey Luskin, Junk No More: ENCODE Project Nature Paper Finds "Biochemical Functions for 80% of the Genome", 2012, www.evolutionnews.org/2012/09/junk_no_more_en_1064001.html (Accessed Mar. 30, 2014)
10. Jonathan McLatchie, Has Francis Collins Changed His Mind On "Junk DNA"? www.evolutionnews.org/2011/03/has_francis_collins_changed_hi044601.html (Accessed Mar. 30, 2014).
11. Michael J. Behe, *Darwin's Black Box: The Biological Challenge to Evolution* (New York: Free Press, 1996).
12. Collins, p. 188-190.
13. Behe, *Darwin's Black Box*.
14. Collins, p. 192.
15. Jonathan McLatchie, Two of the World's Leading Experts on Bacterial Flagellar Assembly Take on Michael Behe, March 2013, www.evolutionnews.org/2013/03/kelly_hughes_an069881.html (Accessed Mar. 30, 2014).
16. Collins, p. 193.
17. Jonathan McLatchie, Once Again, Why Intelligent Design is Not a "God-of-the-Gaps" Argument, 2013, www.evolutionnews.org/2013/01/why_intelligent068151.html (Accessed Mar. 30, 2014).
18. Ibid.
19. Collins, p. 174.
20. Collins, p. 99.
21. Collins, p. 190.
22. www.dissentfromdarwin.org
23. William Dembski, *Intelligent Design: The Bridge Between Science and Theology* (Downers Grove, IL: InterVarsity Press, 1999), p. 248.
24. C. S. Lewis, *The Problem of Pain*, (New York: Simon and

Schuster, 1996), p. 69.

25. Lewis, p. 68.

26. Michael L. Peterson, C. S. Lewis on Evolution and Intelligent Design biologos.org/blog/series/lewis-id-series, p. 13 (Accessed Mar. 30, 2014).

27. John G. West, *The Magician's Twin: C. S. Lewis on Science, Scientism, and Society* (Seattle: Discovery Institute Press, 2012).

28. West, p. 114.

29. West, p. 131 quoting from *Miracles* by C. S. Lewis, 1960.

30. West, p. 140-141.

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The Five Crises in Evolutionary Theory

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



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

The Case of the Missing Mechanism

The growing crisis in Darwinian theory is becoming more apparent all the time. The work of creationists and other non-Darwinians is growing and finding a more receptive ear than

ever before. In this discussion I want to elaborate on what I believe are the five critical areas where Darwinism and evolutionary theory in general are failing. They are:

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

Much of the reason for evolution's privileged status has been due to confusion over just what people mean when they use the word evolution. Evolution is a slippery term. If evolution simply means "change over time," this is non-controversial. Peppered moths, Hawaiian drosophila fruit flies, and even Galapagos finches are clear examples of change over time. If you say that this form of evolution is a fact, well, so be it. But many scientists extrapolate beyond this meaning. Because "change over time" is a fact, the argument goes, it is also a fact that moths, fruit flies, and finches all evolved from a remote common ancestor. But this begs the question.

The real question, however, is where do moths, flies, and finches come from in the first place? Common examples of natural selection acting on present genetic variation do not tell us how we have come to have horses, wasps, and woodpeckers, and the enormous varieties of living animals. Evolutionists will tell you that this is where mutations enter the picture. But mutations do not improve the scenario either. In speaking of all the mutation work done with bacteria over several decades, the great French zoologist and evolutionist Pierre-Paul Grasse' said:

What is the use of their unceasing mutations if they do not

change? In sum, the mutations of bacteria and viruses are merely hereditary fluctuations around a median position; a swing to the right, a swing to the left, but no final evolutionary effect.

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

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

The Origin of Life

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

Early experiments suggested that it was relatively simple to

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

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

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

More than 30 years of experimentation on the origin of life in the fields of chemical and molecular evolution have led to a better perception of the immensity of the problem of the origin of life on earth rather than to its solution. At present all discussions on principal theories and experiments in the field either end in stalemate or in a confession of ignorance." [From *Interdisciplinary Science*

Review 13(1988):348-56.]

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

The Inability to Account for Complex Adaptations

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

Darwinian explanations of complex structures such as the eye and the incredible tongue of the woodpecker fall far short of realistically attempting to explain how these structures arose by mutation and natural selection. The origin of the eye in particular, caused Darwin no small problem. His only suggestion was to look at the variety of eyes in nature, some more complex and versatile than others, and imagine a gradual

sequence leading from simple eyes to more complex eyes. However, even the great Harvard evolutionist, Ernst Mayr, admits that the different eyes in nature are not really related to each other in some simple-to-complex sequence. Rather, he suggests that eyes probably had to evolve over forty different times in nature. Darwin's nightmare has never been solved. It has only been made 40 times more frightening for the evolutionist.

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

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

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

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

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

While publishing hundreds of articles pertaining to molecular homology and phylogeny of various proteins and nucleic acids

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

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

The Bankruptcy of the Blind Watchmaker Hypothesis

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

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

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

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

How did wings get their start? Many animals leap from bough

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

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

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

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

A third faulty assumption is the often used analogy to

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

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

The Prevalence of Stasis over Mutability

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

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

Some animals and plants have remained unchanged for literally hundreds of millions of years. These "living fossils" can be more embarrassing for the evolutionist than they often care to admit. One creature in particular, the coelacanth, is very instructive. The first live coelacanth was found off the coast

of Madagascar in 1938. Coelacanths were thought to be extinct for 100 million years. But most evolutionists saw this discovery as a great opportunity to glimpse the workings of a tetrapod ancestor. Coelacanths resemble the proposed ancestors of amphibians. It was hoped that some clues could be derived from the modern coelacanth of just how a fish became preadapted for life on land, because not only was there a complete skeleton, but a full set of internal organs to boot. The results of the study were very disappointing. The modern coelacanth showed no evidence of internal organs preadapted for use in a terrestrial environment. The coelacanth is a fish—nothing more, nothing less. Its bony fins are used as exceptionally well-designed paddles for changing direction in deep-sea environment, not the proto-limbs of future amphibians.

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

If Darwin were alive today, I believe he would be terribly disappointed. There is less evidence for his theory now than in his own day. The possibility of the human eye evolving may

have caused him to shudder, but the organization of the simplest cell is infinitely more complex. Perhaps a nervous breakdown would be more appropriate!

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Jerry Coyne's Illusions

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

Jerry Coyne Says Science Proves We Make No Real Choices



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



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

and energy.

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

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

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

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

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

Coyne's Ultra-naturalism "Predetermines"

His Conclusions

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

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

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

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

Jerry Coyne’s first line of evidence turns out to be an

unverified materialist assumption that has plenty of physical evidence that cannot be explained on a materialist basis. So much for convincing evidence. But to his credit, Coyne proceeds to scientific evidence he says demonstrates that brain measurements indicate our “decisions” can be predicted by observing blood flow to certain areas of the brains seconds before we actually feel we have “decided.”

Does Our Brain “Decide” Before We’re Conscious of the Decision?

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

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

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

or go when the traffic light unexpectedly turns yellow? Each of those decisions takes far less than seven seconds.

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

Coyne is Required to Pretend He Has Choice

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

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

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

Now that's a mouthful. First, Coyne rejects despairing nihilism simply because we are bound by the laws of physics. That's my understanding of his rationale that our "feeling" of personal agency is so overwhelming. But I hope you caught the absurdity of the following comment. Coyne says, "for our

feeling of personal agency is so overwhelming that we have no choice but to pretend that we do choose.” Really? We have no choice (was the pun intended?) but to “pretend” that we do choose?

I have to say that when your worldview requires you to pretend that reality is something other than what you perceive, your worldview clearly can't be trusted.

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

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

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

Towards the end of Coyne's commentary he tries to discern what we should do with our understanding that we don't have any free will. First, as you might suspect, he disparages religion, specifically Christianity. He concludes that, since we have no real choice, none of us can really choose Jesus or reject him. It's all predetermined by our genetic and environmental history. So, “If we have no free choice, then such religious tenets—and the existence of a disembodied

'soul'—are undermined, and any post-mortem fates of the faithful are determined, Calvinistically, by circumstances over which they have no control." Well, there you have it, Reformed theology according to Jerry Coyne.

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

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

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

Just one word: Huh?

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

Thanks for reading.

Notes

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

2. Mario Beauregard and Denyse O'Leary, *The Spiritual Brain: A Neuroscientist's Case for the Existence of the Soul* (Harper One: New York, NY, 2007).

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