Why Evolution is Not True

BECAUSE NATURAL SELECTION DOES NOT EXIST

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Introduction

This eBook is an extension of the podcast *TruthFinder*. The mission statement for *TruthFinder* is to search for crucial answers to critical questions about belief, non-belief, and everything in between.[1] This search attempts to be as objective as possible, since the real truth will always be true, regardless of what a person knows, thinks he or she knows, believes, or feels. Accordingly, in this edition, we'll be challenging a core foundation upon which a Godless worldview rests—Darwinism, or the idea that the diversity of life can be explained by the purely natural process of evolution by natural selection. We'll be exposing the foundation upon which Darwinian evolution is based, and when we unearth said foundation, the structures that are supported by it may shake. When we use modern science to scrutinize a nineteenth-century theory, what will be the ultimate conclusion? Will an objective assessment force us to seriously reconsider Darwin's theory of evolution? Will the supporting structures that rest upon the theory of evolution crumble and fall? In pursuit of the truth, we shall find out. Much is at stake, because if a Godless worldview does *not* have a plausible explanation for life, then the explanation is insignificant, and the corresponding worldview is in vain.

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Charles Darwin is best known for his theory of evolution by natural selection. His theory was put forth in his magnum opus, *The Origin of Species*, published in 1859. *Origin* had the potential to forever change the world because it presumably described how the diversity in nature could be explained by purely natural processes. Yet today, more than 150 years later, roughly three out of ten (34 percent) adults in the United States reject evolution entirely. Even among the adults that do believe in evolution (62 percent), roughly half are skeptical that evolution happens *exclusively* due to natural processes.[2] This means that more than six out of every ten Americans doubt that evolution is true or deny how it happens according to scientific consensus[3]--that is, solely by natural means. The truth is never based on public opinion, but a nagging question is evident: Why is there such resistance to accepting evolution as true? Are the majority of Americans in the dark … or just plain stupid? Does gross misinformation exist? Do scientists have access to evidence that laypeople don't? Are the people biased? Are the scientists biased? Is the scientific community involved in a grand hoax? Am *I* reading too much into this? Could it be that (gasp) *Darwin was wrong*?

Some evolution skeptics dismiss the theory without a thorough consideration of the facts, and others lack conviction despite being cognizant of the full breadth of evidence. To validate their position, many in both camps end up saying similar things. What I hope to do in this episode is something new: make a case for why Darwin's theory of evolution by natural selection is not true *because natural selection does not exist*. Natural selection has little to do with real science and much to do with a philosophical assumption. What I intend to therefore demonstrate is that ultimately, evolution amounts to an anemic hypothesis based on speculation and untestable assumptions.

Indeed, the claim that evolution is not true stands in opposition to the scientific consensus that evolution is an all-embracing fact.[4] However, as I shall validate, just because a person (or a group of people) is an expert does not mean he or she is inerrant, nor does it

mean his or her reasoning is correct. For non-experts, it appears that many of those who embrace Darwinian evolution by natural selection do so out of ignorance, without ever having carefully scrutinized it or investigating the "facts" for themselves.[5] Michael Behe, the author of *Darwin's Black Box*, discovered that this assessment was true not only for public grade and high school students but for people in the media, graduate students in the biological sciences, and the teachers of those graduate students.

At no point in this analysis will I make the argument or draw the conclusion that "God did it." What I intend to show is that a person doesn't need a speck of religious persuasion to reject Darwin's theory. All you need is logic, common sense, and to actually examine the facts for yourself. God doesn't need to defeat Darwin because Darwin does an excellent job all by himself—with an enormous amount of help from science. There is one question that science always answers or seeks to answer well. That question is *how*. If science doesn't answer that question—or isn't actively pursuing an explanation for *how*—then it fails to be science. Where Darwin's theory fails is not the idea; it's in explaining how. And the more information we gain about life (and how wonderfully complex it is), the more explaining Darwin's theory has to do.

In Part I, I will define what evolution is and clarify terms. I will then explain how natural selection works and what is at stake if Darwin is wrong. In Part II, I will present seven reasons that explain why natural selection does not exist. First, through analysis of Darwin's *Origin of Species* and using his own words, I will explain how Darwin never presented a plausible explanation for natural selection in *Origin*, only some vague theoretical conjectures. Here I will expose the fraudulent logical and philosophical foundation upon which the theory of evolution rests. Second, I will make a scientific case and draw on contemporary knowledge in molecular biochemistry, genetics, and medicine to further validate that natural selection is not real. The foundation upon which I will make this argument is that on a cellular level (where the building blocks of life work), natural selection explains virtually nothing and therefore is not a credible scientific theory. Third, I will explain how the historical piece of evidence most cited as clear proof that evolution happened—the fossil record—is actually a large reservoir of evidence against natural selection. Finally, I will conclude by making an inference about the scientific explanation and discern what meaningful conclusions can be drawn because natural selection is not real and, therefore, evolution is not true.

I do not believe that each reason natural selection does not exist will be totally persuasive in and of itself; rather, each reason will serve as some proof against it so that the cumulative summation of evidence demands the verdict that natural selection is not real. The seven reasons will analyze the scientific facts and make the argument that natural selection does not exist because of either of the following reasons:

> (i) There is no sufficient explanation for how natural selection actually works, as required for any plausible scientific explanation.
>
> (ii) Natural selection is redundant because of other verifiable forces that act instead.

Part I

Defining terms

Evolution and Science

Science answers the question of "How?" by telling us what is. Science plays an invaluable part in helping human beings to understand reality. What I do every day, for example (medicine), is materially advanced by research and empirical trials. True science is, therefore, not something to be denigrated but to be championed. Accordingly, I am in no way anti-science. I am a seasoned medical doctor, and while engaged in my particular field of expertise, I consult scientific trials and concrete data in order to guide treatment plans. In other words, it's all about what is *true* and where the *facts* lead. Hence, this is why I must make an early *distinction* between *science* and *Darwin's theory of evolution by natural selection*. It is simply *because* I champion science that Darwinian pseudoscience cannot be tolerated. The reasons for this distinction will be made clear in what follows. In the medical world, there are real doctors who really graduate medical school and go through real residences to make sure they are not only credentialed but qualified. Then there are quack "doctors" who give themselves an honorary title but shouldn't be treating your enemy's dog. Just as quack MDs give real doctors a bad name, Darwinian evolution by natural selection gives legitimate science a bad name.

Real science can entertain intelligent dissent because real science grows stronger after wrestling with competing ideas. In fact, dissenters propel science forward by challenging the status quo. If science refuses to at least consider competing explanations, then that's not real science, and blind acceptance of the dictates of the establishment is not independent thought—in fact, it exemplifies the *absence* of thought. Hence, we shall embark to discover the scientific truth by fully understanding the objections to that truth. Indeed, religion is perfectly capable of suppressing intelligent thought when it begins to act like a coercive tyrant with an ideology to uphold. Science acting like a religion can also do the same thing.

> Biologists have authority over questions of biology, but they have no authority to impose a philosophy on society.[6]

Let us now begin our quest for the truth by defining what evolution and natural selection are.

Defining terms: What is evolution?[7] What is natural selection?

So what is evolution exactly? The National Academy of Sciences defines evolution as:

> [C]hanges in the heritable traits of a population of organisms as successive generations replace one another. It is populations of organisms that evolve, not individual organisms.[8]

Dr. Jerry Coyne is a biologist and a specialist in evolutionary genetics. In his book *Why Evolution Is True*, he succinctly summarizes the modern theory of evolution in one sentence. He writes:

> Life on earth evolved gradually beginning with one primitive species—perhaps a self-replicating molecule—that lived more than 3.5 billion years ago; it then branched out over time, throwing off many new and diverse species; and the mechanism for most (but not all) of evolutionary change is natural selection.[9]

Coyne then goes on to explain that this statement consists of six components: "evolution, gradualism, speciation, common ancestry, natural selection, and nonselective mechanisms of evolutionary change."[10]

Evolution[11] is defined as the genetic change that a species undergoes over time. The idea is that, as time goes on and species change genetically, over generations, one species (e.g., an orangutan from the genus *Pongo*; an orangutan is also a type of ape) can evolve into another species (e.g., humans). This genetic change comes from mutations. Evolutionary theory does *not* state that all species *must* evolve.

We have to take a brief aside here for a moment to realize that, by definition, evolution is a very broad term that encompasses many diverse things. It is therefore necessary to explicate what someone precisely means by it. "Big evolution" or *macro*evolution is what most people think about when they hear evolution—that is, hominids (apes) evolving into humans. But according to definition, evolution *also* refers to in-species variation—that is, the fact that the genes in a population change over time, like the change in frequency of genes that control fur color in a cohort of red foxes. What's more, evolution can also refer to *cyclical* genetic change in a species, where the frequencies of some genes increase and decrease over the generations. These situations illustrate "small evolution" or *micro*evolution. Microevolution does *not* refer to orangutans evolving into humans. In microevolution, for example, orangutans stay orangutans and bacteria stay bacteria (e.g., *Staphylococcus aureus*), but the allele (gene) frequencies in the respective populations change over time.

Reality tells us that nature is always changing. Reality also tells us that if you give them time, species of animals and plants *all* change. And here's the thing: *Of course species change over time*, and *of course their gene frequencies change*. Not even Darwin skeptics deny this fact. The real question is *how* they change—whether by natural selection or some other explanation—which will be discussed later. Do you know what happens if a village of Eskimos from the North pole moves South and marries and has children with a village of people from Sub-Saharan Africa? You will have a population that has undergone genetic *change* over time.[12] Does this mean that the human beings in this population have "evolved" into a different species? Of course not. It simply means that new generations of humans will have different gene frequencies than their parents. Yet by definition, this example highlights *micro*evolution, though this does not mean that species are *evolving* in the sense that one species evolves into another; it simply means that a species is *changing*.

So, when "evolution" is used to refer merely to *micro*evolution this tells us that American crows[13] will remain crows, but those birds will not become dragons. By incorporating mere genetic change into the *definition* of evolution, many will thus champion the "fact" of *micro*evolution and then subsume the "fact" of *macro*evolution under a unified banner. Science does not have the power to define something into existence. Hence, because what evolution refers to is so broad, when a person says, "I know evolution is true," the next

question to ask is, "What do you mean by that exactly?" My primary concern going forward is "big evolution" or *macro*evolution: how one species presumably evolves into another, thus explaining the diversity of life.

Let's return to Dr. Coyne's definition. The second component of evolution is *gradualism*. Gradualism means that species change slowly over thousands or perhaps even millions of generations. This change does not happen evenly but does happen gradually over long periods of time. *Speciation* is a crucial component of the theory of evolution. This refers to one ancestral population "splitting" into two distinct species. Speciation is thus the phenomenon whereby one species "evolves" into another so that, for example, an orangutan can speciate into an intermediate species, and then the intermediate species can speciate into a human being. What distinguishes one species from another is the *inability* to interbreed. Indeed, individuals do not *have* to speciate, since most species end up extinct.

The fourth component is *common ancestry*, which is self-explanatory: Many descendants have a common parent in the past at some point if we look back in the family tree of evolution. The fifth component—*nonselective mechanisms of evolutionary change*—simply refers to the fact that all evolutionary change does *not* happen by natural selection, which will be discussed next. An example of nonselective change would be couple A, who have twenty children, versus couple B, who have one. In the second generation, there would be more genetic information from couple A simply because they had more children than couple B. Nonselective mechanisms of evolutionary change are *non*-selective and have nothing to do with natural selection; they therefore do *not* have any power to "evolve" new species.[14]

The final component of the theory of evolution is *natural selection.* This is the nonrandom, differential reproduction of alleles from one generation to the next. The evolutionary biologist Richard Dawkins defined natural selection as "the non-random survival of random variants." Dawkins also described natural selection as being a "blind watchmaker" that has no purpose, no vision, no mind, and no plans for the future:

> Natural selection is the blind watchmaker, blind because it does not see ahead, does not plan consequences, has no purpose 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.[15]

Presumably, natural selection results from the carriers of some alleles being better able to survive and reproduce in their environments than the carriers of alternative alleles.[16],[17] Simply put then, natural selection refers to the idea that some individuals vary genetically compared to others, and this genetic variance affects an individual's ability to survive and thus reproduce in its habitat. These beneficial genes would presumably be passed on to members of the next generation, in which more copies of the beneficial genes would exist relative to not-so-beneficial genes. These beneficial genes would in turn equip some individuals to survive and reproduce more and thus repeat the process. Accumulated adaptations over time leads to speciation.

According to theory, natural selection is *non-random*, since it "selects" those organisms that are the best adapted to their environment. Slowly, over long periods of time, *random* variants (mutations) arise, and some prove beneficial to an organism. These are

"selected" *for*. Conversely, harmful mutations are weeded out. These are "selected" *against*. The result of this process is that organisms become better and better suited to their environments, and organisms with better adaptations begin to diverge (or "evolve") from those that are less well-adapted. Seemingly, then, the end result of natural selection plus lots of time is speciation, where one species accumulates so many beneficial adaptations that it "evolves" into another. So theoretically, "since many traits can affect an individual's adaptation to its environment (its 'fitness'), natural selection can, over eons, sculpt an animal or plant into something that looks designed."[18]

It is important to remember that natural selection does not select *organisms*—it selects *genes*. This idea was popularized in *The Selfish Gene* by Richard Dawkins. So, finches, tigers, and frogs are all merely "bags of DNA," and when these animals die, their genes live on. This means that, in the drama of evolution, *genes* (not organisms) are the central actors. What this therefore also means is that, at its core, life is merely the survival of selfish genes. Biology is not concerned with purpose, but for the sake of argument, the only real "purpose" of life is for DNA to make more copies of itself. Thus, according to Darwinism, the goal of life is survival—nothing less, nothing more.

Defining terms: What does natural selection do in evolution?

Evolution works *by* natural selection. Natural selection is the engine of evolution and *the means* by which evolution happens. Natural selection is the *exclusive* process that preserves adaptations[19] and thus results in speciation. In other words, natural selection and natural selection *alone* is what yields all the splendid diversity of species in nature and is what seemingly molded tadpoles to creepy crawlers to hairy beasts that roam about on two legs. Over time, you *cannot* have big evolutionary changes in a population *without* natural selection.[20] Without natural selection, macroevolution *will not* happen.

In fact, if you refer back to evolution's source—Charles Darwin—there is *no* distinction between the theory of evolution and the theory of natural selection. They are, in fact, essentially one and the same. Evolution says that things slowly change over time and change into different things. Natural selection allegedly explains how. There are many in modernity who may try to separate the two, but Darwin didn't, nor should we. Again, you *cannot* have macroevolution (descent) without natural selection:

> Without natural selection, Darwin declared, the theory of descent was unintelligible and unprovable; natural selection in showing *how* species descended from others, also showed that they *did* descend from others.[21]

In fact, logically speaking, natural selection has priority and must come first because it is what makes evolution possible. Let us not forget the full title of *Origin* is "On the Origin of Species *by Means of Natural Selection*."

The engine that drives the car of evolution is natural selection. When we look under the hood and see what the engine consists of, we see that natural selection has three core components:[22]

> (1) A population has to be variable.
>
> (2) There has to be heritability, or the fact that variation exists because of genetic variation.

(3) This genetic variation then affects the probability that an organism will leave offspring.

In other words, in a given population, different gene frequencies in organisms yields variability. This genetic variability affects survival ability, and the "best genes win." But where does this genetic variation come from? The source of novel genetic information comes exclusively from mutations, which are *random* changes in DNA. Random simply means that mutations happen by chance and occur *regardless* of whether or not they would benefit an organism. What is therefore absolutely crucial to understand is that *natural selection does not create any new genetic information in any way*; it merely supposes to *preserve* existing genetic information by preserving beneficial mutations.

It is also essential to understand that natural selection is not an *event* but a *process*. By definition, it is an ongoing progression whereby gene frequencies in populations change over time. The theory supposedly gains validation when traits can be correlated with environmental changes, and gene frequencies can be measured in parents and offspring. Again, the big question is exactly *how* natural selection works to affect this process of gene frequency change. If science merely defines natural selection as the process that yields genetic variability, then it has proven nothing and merely defined a tautology. What science must do is show how natural selection works and therefore what it does in evolution.

Defining terms: What does evolution by natural selection attempt to explain?

The diversity of life. Not the origin of life, but the diversity of species. Darwin himself wrote that, for the conclusion of common descent with modification (evolution) to be true, science would have to offer an explanation for how all the species on the planet speciated:

> [S]uch a conclusion, even if well founded, would be unsatisfactory, until it could be shown how the innumerable species inhabiting this world have been modified, so as to acquire that perfection of structure and co-adaptation which justly excites our admiration.[23]

Furthermore, Dr. Jerry Coyne writes:

> The theory of natural selection has a big job—the biggest job in biology. Its task is to explain how every adaptation evolved, step by step, from traits that preceded it. This includes not just body form and color, but the molecular features that underlie everything. Selection must explain the evolution of complex physiological traits: the clotting of blood, the metabolic systems that transform food into energy, the marvelous immune system that can recognize and destroy thousands of foreign proteins.[24]

In a sense, the theory of evolution places a huge burden on itself because it attempts to give an explanation for the origin of species for *all* animals and plants. In fact, Darwin speculated that all animals and plants are descended from one common prototype and for each, at most four or five progenitors.[25] Hence, for evolution by natural selection to be true, it *must* elucidate a plausible mechanism for speciation for *all* organic beings that

have ever lived. And, as Darwin himself writes, this explanation isn't just for mediocre life. This explanation clarifies a movement toward perfection:

> And as natural selection works solely by and for the good of each being, all corporeal and mental endowments will tend to progress toward perfection.[26]

Life is incomprehensibly complex, so explaining life step by step and piece by piece is more than a big job in biology. Besides explaining the origin of our universe, I daresay it is the biggest job in the cosmos. What's more, the theory of evolution must complete its job by describing the *precise* mechanisms of how natural selection acts step-by-step via interaction with the code of life, DNA. Let us remember that natural selection is the blind mechanism that is supposed to have crafted butterflies, frogs, owls, bears, apes, and humans, and it is supposed to have done this reliably enough to manufacture brains, eyes, wings, and claws in these distinct groups. Evolution from a single-celled organism to a human being is a huge leap, and to say "evolution did it" is an extraordinary claim. Extraordinary claims demand extraordinary evidence. This claim cannot be *explained away* with rhetoric, vague flowery examples, or speculations about what *may* happen. It must provide something concrete. If it doesn't, then the theory of evolution falls apart.

Interlude

Now that we have a solid idea of what evolution by natural selection is, what it supposedly does, and what it attempts to explain, we will take a brief moment to consider where we are going.

As described earlier, our attention will not be on *micro*evolution but on *macro*evolution. Linguists can debate definitions *ad nauseam*, but my primary concern going forward is not what is defined into existence but what the facts actually tell us. I will not be concerned with established species merely *changing*, but with one distinct species evolving (speciating) into another. This assessment of course comes with the realization that the bridge between *micro*evolution and *macro*evolution is theoretical and imaginary (this will be explained more fully shortly):

> It is good to keep in mind … that nobody has ever succeeded in producing even one new species by the accumulation of micromutations.[27]

Science has no power in and of itself because its power comes from its ability to *describe* how things work and the fact that we can test and duplicate our findings. The science is only as powerful as its description. The core principle to be found here is that any credible scientific theory must explain *how* in clear and precise terms. If science *cannot* provide a plausible explanation for how, then for now (scientifically speaking) there is only one logical conclusion: No plausible explanation exists. Silence is therefore warranted. Science could throw its hands up in the air and say, "I give up," but that would be very unscientific. What real science now does is keep on trying until it does have a credible answer that is worth sharing.

So what do the facts actually say? Does the evidence support Darwinism? What I shall explain next is that no, it does not. Subsequently, what you are left with is a theory of evolution by natural selection that simultaneously pretends to explain everything while explaining nothing at all. Natural selection *poses* as a scientific theory and claims to be a rational deduction from the evidence but it is in fact a flawed argument based on mere speculation. Ultimately, natural selection explains nothing *because it is nothing*.

True science cannot ignore crucial details that are relevant to natural selection, and if the details are ignored, then what we are left with is what John Maynard Smith called "fact-free science."[28] As I go through distinct reasons for why natural selection does not exist (and thus why evolution is not true), always keep in the back of your mind one simple question: Does the current science actually explain *how* natural selection specifically works, or does it merely describe what natural selection *does*? Indeed, just because something has little evidence behind it or explains little does not mean it does not exist. However, natural selection is a huge scientific claim that carries a huge burden; therefore, we will look for a plethora of evidence.

In what follows, I will describe seven reasons natural selection does not exist. Each section is intended to be self-contained and stand by itself, so the reader will find that, in reading through them all, there will be some overlap of information.

Part II

Why Natural Selection Does Not Exist

***Reason #1*: Because natural selection lacks legitimate explanatory power**

(i) There is no sufficient explanation for natural selection itself. In order for natural selection to work, it requires a genetic mechanism to already be in place and fully functional. Indeed, we have to be clear that Darwinism does not claim to provide an explanation for the *origin* of life, but for the *diversity* of life. Still, evolution can only get started if a world hospitable to life already exists *and* if DNA is already present. Life functions *with* a genetic mechanism, so life could not have evolved *without* a genetic mechanism that stores information, codes for proteins, has the ability to replicate, and interacts with other physical entities according to fixed, specific laws. Where did the *structure* of DNA come from?[29] Where did the genetic *code* of DNA come from?[30] What explains all these phenomena?

These are very tough questions and in general, scientists are baffled about how life originated. They may have a few public speculations but no legitimate elucidations.[31] Consider what Klaus Dose, a prominent worker in the field of origin-of-life research, says:

> 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 a stalemate or in a confession of ignorance.[32]

Antonio Lazcano of the International Society for the Study of the Origin of Life reports, "The exact pathway for life's origin may never be known."[33] Explaining the origin of life is a grandiose task that exceeds the scope of our current endeavor. Yet, some nagging questions present themselves: Was natural selection always in existence, or did it "come to be" after a genetic mechanism for life developed? If natural selection was in existence before a genetic mechanism for life developed, then *why* was it in existence (since it had nothing to select *for*)? If natural selection has enough creative power to explain the diversity of life, then what explains natural selection?

The reader may object and say, "We can't explain where gravity comes from, but it's real." Undeniably, you are right. But we can *quantify* gravity and therefore *predict* what will happen, for example, when two objects of different mass fall from the sky. It is the mere fact that we can measure gravity's power that validates it as a real force. Natural selection is not quantified. It is not a constant. It is not a mathematical variable that is inserted into an equation. It has no forward-looking predictive power; it can only describe in retrospect.

In his book of the same name, Richard Dawkins equates natural selection to a "blind watchmaker." Well, has anyone ever stopped to ask, "What explains the watchmaker?" After all, a watchmaker is a complex being. What good is a watchmaker if he is blind? What does the blind watchmaker actually do in his shop? Why is life so astoundingly

complex if the process that made it is blind, deaf, and mute? Ultimately, blind watchmakers do not exist—you can have a blind man who is a useless watchmaker or you can have a sighted watchmaker who elegantly designs and creates, but a "blind watchmaker" is an oxymoron. Even when proponents of natural selection use terms like "automatic" or "blind," these terms by themselves imply complexity and pre-conceived programming such as that found in an automatic alarm clock or a perpetual motion watch that requires no further input from a human agent (the reader may object and say I am merely arguing against the metaphorical use of natural selection; I interact with this objection in section *iii*).

When natural selection "goes to work," what does it actually work on in DNA? Does it target whole genes, parts of genes, or the entire chromosome? Is natural selection working right now on me? On you? Is it always on and a constant force, or is its force variable? If natural selection is blind and without purpose, then over time, how does the *process* actually work? A process by definition implies sequential steps that are interrelated and thus dependent on one another. Ultimately, there is no sufficient answer to any of these questions in the modern theory of evolution by natural selection.

(ii) Darwin never explained how natural selection actually works—neither has anyone today. Many in modernity allow others to interpret reality for them. There are many, for example, who passively allow third parties to tell them what current events "really mean." Many neglect to take the reins of their own beliefs and discern what is really true. This is absurd. This is relevant to the topic at hand because there are many in contemporary society who interpret the "facts of evolution" for us and tell us what is "truly true." The genuine fact of the matter is that if people took an earnest look at what Darwin actually said about his own theory, they would find the gross *absence* of facts and supporting evidence. What Darwin put forth in *Origin* was merely a hypothesis. He merely speculated about what could be (philosophy) without actually demonstrating how (science). These philosophical conjectures actually prove nothing. But you don't have to take my word for it, which brings me to an important point: Anyone actually serious about evolution *must* read *The Origin of Species*. How else can an informed opinion be generated?

In the introduction to *The Origin of Species*, Darwin writes:

> For I am well aware that scarcely a single point is discussed in this volume on which facts cannot be adduced, often apparently leading to conclusions directly opposite to those at which I have arrived. A fair result can be obtained only by fully stating and balancing the facts and arguments on both sides of each question; and this is here impossible.[34]

What Darwin is saying is that for the theory he is about to describe, many facts may be cited as evidence for the points to be made; however, those facts can lead the reader to conclusions that *totally contradict* descent with modification (evolution). What would be fair, according to Darwin, is to give a balanced presentation of those facts and weigh the evidence. However, such a rigorous course will not be pursued in the book, for it is "impossible." This admission is important because before he even begins *Origin*, Darwin minimizes the impact of his own conclusion—that evolution is true. Darwin leaves the door wide open for evolution *not* to be true.

Darwin subsequently proposed that the variety observed in different species in nature developed by natural selection. He defined natural selection as the principle "by which each slight variation, if useful, is preserved,"[35] and this preservation is the result of that variation being in some way profitable to survival. Because more individuals are born than can survive, "individuals having any advantage, however slight, over others, would have the best chance of surviving and procreating their kind."[36] Hence, the *preservation* of favorable individual differences is called natural selection. Variations that are neither beneficial nor harmful would not be affected by the selection process. In fact, those individuals that do not become "modified and improved in a corresponding degree with [their] competitors"[37] would be exterminated. Natural selection implies that advantages are always being "selected," but in reality, selection only tends to eliminate whatever does not yield a competitive advantage. A variation, then, need not give any positive benefit to an organism. It only needs *not* to give any negative *dis*advantage.[38] Natural selection can *only* work if a favorable variation is inherited. Of course, the struggle for existence or "survival of the fittest" is most significant *within* species rather than *between* them? individuals of the same species struggle with *each other*. It is individuals in the same species that tend to live in the same locale, compete for the same food, and be subjected to the same environmental conditions.[39]

The reader must note that "survival of the fittest" is predicated on an *assumption*—that life is *competitive* and that in said competition, an organism *must* have an advantage that allows it to produce more offspring. This model fails to embrace the reality that life is *cooperative* (e.g., parenting), and oftentimes it is the *lack* of an individual advantage that makes life possible and equips an organism to survive. For example, there are more bacterial cells in your body than there are human cells. The bacteria in your gastrointestinal system (the microbiome) enable you to process and properly digest your food; they also play a crucial role in modulating your immune system and regulating your mood. Human life is dependent on bacterial life, which is genetically distinct from the person; thus, when you have children, you don't pass on the DNA of the bacteria in your gut. The point is that a healthy microbiome (which is cooperative and would portend health benefits) is neither competitive nor heritable.

Although in modernity people use the term "survival of the fittest" to explain the Darwinian struggle for life, Darwin himself merely used fitness as a way to describe reproductive success and nothing more. In *Origin of Species*, the word did not convey the sense of inherent superiority it does now. Furthermore, he used "struggle for life" in a large and metaphorical sense, which includes the dependence of one animal on another, or the "struggle" of a plant in the midst of drought.[40]

(iii) The term natural selection is a deception. Why? Because natural selection *does not select* and therefore lacks explanatory power. According to Darwin, nature is not a conscious agent; it neither *selects* anything nor *induces* variability. Rather, natural selection only preserves those beneficial variations that individuals *already have*. Darwin himself made an honest assessment of language when he said the term natural selection is a "false term," not to be taken literally but used metaphorically, as a chemist would speak of the "affinity" of elements or a physicist would speak of the "attraction" of gravity.[41] Cognizant of this admission, Darwin still often referred to natural selection as having active, conscious, mystical, and seemingly divine powers:

> It may be metaphorically said that natural selection is daily and hourly scrutinising, throughout the world, the slightest variations; rejecting those that are bad, preserving and adding up all that are good; silent and insensibly working, whenever and wherever opportunity offers, at the improvement of each organic being in relation to its organic and inorganic conditions of life. We see nothing of these slow changes in progress, until the hand of time has marked the lapse of ages.[42]

How can a mind*less* environment "select" for an adaptation in the present that will ultimately build a new species in the future? If no purpose or goal is in mind, then why select at all?

If something selects, then there must be a selector. Yes, selection is metaphorical, but metaphors can only be used in science when quantifiable phenomena are being discussed. No one says, "I saw a beautiful Earth rotating on its axis away from the Sun." They say, "I saw a beautiful sunset."[43] We can say this because we are fully aware of the causal forces that compel the Earth to rotate on its own planetary axis and orbit around the Sun. If natural selection is a causal agent that actually does something, no one has the right to use metaphorical terms until natural selection is properly quantified. Until then, the metaphors are left to the poets and philosophers. In fact, the illusion of selection draws one to presume there is an external force acting on an organism when in fact all adaptive power is internal—more on this later.

So, "selection" is deceitful because no conscious agent is selecting. "Selection" denotes choice and also denotes intelligence, as nature "selects" those organisms that are the best adapted. Harvard's leading evolutionary authority, Ernst Mayr, in *What Evolution Is* disclosed this veiled truth that involves not one selecting agent but a host of other causal variables. What Darwin called "natural selection" is actually just what happens in life:

> The conclusion that these favored individuals had been selected to survive requires an answer to the question, Who does the selecting? In the case of artificial selection, it is indeed the animal or plant breeder who selects … But, strictly speaking, there is no such agent involved in natural selection. *What Darwin called natural selection is actually a process of elimination*. The progenitors of the next generation are those individuals among their parents' offspring who survived owing to *luck* or the possession of characteristics that made them particularly well adapted for the prevailing environmental conditions.[44] [Emphasis added.]

A process of elimination is just that—a multivariable process—and luck, of course, is a word people use when something happens that they want to explain but can't in precise terms.

(iv) The analogy between artificial selection and natural selection actually discredits the latter. Natural selection was a term derived from animal breeders and horticulturists. So, just as a man could select (artificial selection) certain organisms with certain traits to suit his desires (like crossing all flowers of a certain color to produce more of the same), by analogy, nature "selects" those organisms best adapted to their environment. Death was therefore the final determinant of who was "fittest" to survive. Man, being an intelligent

and conscious agent, therefore makes a mindful selection with a purpose and a future goal in mind. Nature, on the other hand, is mind*less* and "preserves" those best adapted *without* a purpose and *without* a future goal in mind. The difference, then, between artificial selection and natural selection is everything. Yet, the main explanatory method Darwin used to clarify how natural selection works was analogy, despite the fact that the analogy was inherently and tragically flawed. Darwin *never* explained using precise and definitive terms *how* natural selection actually works. He only clarified what it *did*.

Still, in spite of this fallacious logic, Darwin championed the blind, purposeless, non-directed power of nature over that of artificial selection—he called natural selection "immeasurably superior"[45] to artificial selection by human beings. Darwin makes the connection thusly:

> As man can produce, and certainly has produced, a great result by his methodical and unconscious mean of selection, what may not natural selection effect? Man can act only on external and visible characters: Nature, if I may be allowed to personify the natural selection or survival of the fittest, cares nothing for appearances, except in so far as they are useful to any being. She can act on every internal organ, on every shade of constitutional difference, on the whole machinery of life. Man selects only for his own good: Nature only for that of the being which she tends. Every selected character is fully exercised by her, as is implied by the fact of their selection.[46]

Darwin also used analogy to make a connection between what man can do via artificial selection in a lifetime and what natural selection can do over many generations:

> Slow though the process of selection may be, if feeble man can do much by artificial selection, I can see no limit to the amount of change, to the beauty and complexity of the co-adaptations between all organic beings, one with another and with their physical conditions of life, which may have been effected in the long course of time through nature's power of selection, that is by survival of the fittest.[47]

The way Darwin framed his hypothesis, natural selection was superior to artificial selection, since people could only select for gross traits (e.g., the color of a flower), while nature could exercise discriminate tastes for very subtle, imperceptible adaptations over very long periods of time. Again, the difference between artificial selection and natural selection is everything, yet a deceitful comparison is still being used in modernity. Two examples would be computer programs "blindly selecting" specific sequences of characters or a monkey smashing keys on a typewriter and someone waiting to see how long it is before it produces Macbeth. Both of these experiments involve an intelligent, human mind that *designs* an experiment with a purposeful, pre-determined goal in mind.[48] And furthermore, when a computer or a typewriter is used, both of these entities are *designed*. Both of these analogies do not demonstrate the "power" of natural selection. They merely demonstrate the power of the human imagination to believe in something despite all the contrary evidence.

(v) Because Darwin's attempt at an explanation was so fluid, it could be molded to explain away anything. Seemingly, if one were to allow natural selection to continue for a

very long time, variations (that positively impact survival) would slowly accumulate and gradually "evolve" different species. Indeed, there is no magic in time itself, because as Darwin himself wrote, time is neutral and does not act for or against natural selection. The lapse of time is merely a vehicle by which beneficial variations may arise, be preserved, accumulate, and then become fixed.[49]

Accordingly, what *Origin* contains is hundreds and hundreds of pages of *explaining away* a hypothesis with philosophical conjectures without ever clarifying a precise scientific explanation for *how* natural selection works. What Darwin did do is provide many imaginary illustrations. In one, he describes an environment where wolves and deer coexist. In one season, the number of deer decreased, so that only the slimmest and fastest individual wolves would have the best chance at survival (assumption) because of their presumed ability to catch their prey and eat (assumption). Hence, these wolves would have the best chance at surviving and thus be preserved by natural selection (assumption).[50] Thus, when Darwin postulated, for example, how a complex organ like an eye developed, he did not explain a pathway. He merely stated the observation that different types of organisms have different types of eyes and thus suggested that *possibly, maybe* intermediates may have existed. If I were asked, "How did the diversity of life originate?" and I quickly blurted out, "The flying spaghetti monster," that would be an "explanation" that merely *explained away* facts because we don't have an explanation for the monster. Endless appeals to this mystical being magically explain everything while explaining nothing at all. So, if the only argument that Darwinism can make is rhetorical, with endless appeals to the "magic" of natural selection, what you actually have is an explanation that is full of nothing.

Is natural selection a force? If so, then how do we measure it? Without being able to quantify natural selection, how do we know it is *causal* in survival—how does one ascertain that it was natural selection that selected for survival and not something else? How do we determine, for example, that a wolf survived better than its peers *because* of natural selection preserving an adaptation verses the mere fact that the wolf gained access to a human's rations? If natural selection is not a force or something that cannot be quantified, then how does it belong to the realm of science? These are all questions that were not addressed in *Origin*, nor have they been addressed in modernity. What results is a process that—like a flying spaghetti monster—can explain away all facts and objections without explaining anything at all.

> [I]n Darwin's theory cause and effect were related in such devious ways as to permit almost any conjecture and to resist all control and verification.[51]

Addressing Darwin's techniques to validate his theory, the biographer Gertrude Himmelfarb comments how historically, Darwin's response to his critics demonstrated less the consistency of his theory than the theory's plasticity in bending itself to accommodate other explanations:

> Darwin could summon up enough general, vague and conjectural reasons to account for this peculiar fact; if others did not, he had at hand a different but equally general, vague, and conjectural set of reasons to account for that.[52]

Essentially, then, because Darwin only described what natural selection did, his logic pointed to *effects* in reality without thoroughly explaining the *causal* agent. So, what he did achieve in *Origin of Species* was merely the construction of a "logic of possibility."[53] Under normal circumstances, logic eliminates possibilities in order to arrive at a concrete conclusion. The logic that Darwin used in *Origin* marched in the opposing direction so that a massive heap of speculations equated to a reasonable probability. Hence:

> As possibilities were promoted in probabilities, and probabilities into certainties, so ignorance itself was raised to a position only once removed from certain knowledge. When imagination exhausted itself and Darwin could devise no hypothesis to explain away a difficulty, he resorted to the blanket assurance that they were too ignorant of the ways of nature to know why one event occurred rather than another, and hence ignorant of the explanation that would reconcile the facts to his theory.[54]

Darwin therefore manufactured truth as opposed to revealing it. But if all of what Darwin did was a fabrication, then why was it so persuasive? We may never have a precise answer to why Darwin's personal beliefs were accepted as truth, but perhaps modern research does help us. Cognitive neuroscientist, psychology professor, and evolutionist Michael Shermer's work was summarized by fellow evolutionist A. C. Grayling in *Nature*. There, he highlights the brain's "readiness to nominate agency—intentional action—as the cause of natural events."[55] Perhaps Darwin was keenly aware that the human mind was ready to elect something outside of itself as the life-molding force that brought about all the diversity in nature.

(vi) Serious and legitimate doubts about natural selection's explanatory power are over a hundred years old. Indeed, skepticism about Darwin's theory is not new, and when we look back into history, what we see is that the scientific community was already raising serious doubts about Darwin's theory soon after *Origin* was published. In 1869 (10 years after *Origin*), Alfred Russell Wallace published a famous critique of Darwinism in *Quarterly Review* (this critique was found in a review of Charles Lyell's *Principles of Geology*).[56] Wallace was a naturalist, a geographer, and an anthropologist. As a whole, Wallace was very doubtful of Darwin's explanation for evolution by natural selection. In fact, Wallace's essay was a crucial moment because it marked a falling-away in faith of one man who was previously not only a champion of the idea of evolution but also a lead architect in constructing the hypothesis. In short, Wallace's main point of contention was that Darwin's theory could not offer a plausible explanation for several components of life, including the mind, speech and articulation, the human hand, and the external human form (an upright posture with bipedal gait). The only way, for example, to explain people walking upright on two feet is an unknown ancestor who wanted to stand up to see over tall grasses. Why do only humans have language? Or morals? Or math? Or logic? Or music? This list is abbreviated, but you get Wallace's point.

In regard to natural selection, Wallace writes that not only does "selection" imply a selector, but what happens in nature is not the effect of a solitary "selection force" over life but the result of the interaction of *many* variables in nature. For example, a mystical force doesn't select sand to fall on the beach; rather this is the result of quantifiable

phenomena like gravity, time, and the changing of the tides. Additionally, the implication that those who are most likely to survive do survive is a tautology:

> "[S]urvival of the fittest," a term which states the absolute fact, that those best adapted to survive do survive, and those least adapted die. This is Mr. Darwin's celebrated theory of "Natural Selection," but which is more properly a self-evident principle or axiom. Having been led to it by the analogy of the choosing or selecting by man of certain varieties to continue the breed, while others were neglected or destroyed, he personified the various natural causes which led to the preservation of the half million, and the death of the million, and termed them "natural selection." But people are continually forgetting that the term is an analogical one, and object over and over again that "selection" implies a selecter; whereas if they would take pains to understand the thing, instead of puzzling over the mere term, they would see that the preservation of those best fitted to live, was as much the secondary result of the powers of nature as is the arrangement of sand and pebbles by water, or the selecting of leaves to be drifted into heaps by the wind, while the stones and sticks are left behind.

Because Darwin personified and bundled various natural causes under the term "natural selection," it is impossible to say what was *causal* in the survival of an organism. Why is that? Because an organism is neither independent of its environment nor totally dependent on it. Higher organisms are conscious agents that interact with myriad variables throughout the course of their entire lives, and their survival is thus the result of myriad variables.

Furthermore, Wallace also questions how new advantages evolve if (i) there is no clear explanation for what positive advantage the fully evolved trait imparts and (ii) how an adaptation that diverges from the rest of a well-adapted population is not regarded as a *disadvantage* and therefore prone to elimination:

> We have further to ask—How did man acquire his erect posture, his delicate yet expressive features, the marvellous beauty and symmetry of his whole external form; a form which stands alone, in many respects more distinct from that of all the higher animals than they are from each other? Those who have lived much among savages know that even the lowest races of mankind, if healthy and well fed, exhibit the human form in its complete symmetry and perfection. They all have the soft smooth skin absolutely free from any hairy covering on the dorsal line, where all other mammalia from the Marsupials up to the Anthropoid apes have it most densely and strongly developed. What use can we conceive to have been derived from this exquisite beauty and symmetry and this smooth bare skin, both so very widely removed from his nearest allies? And if these modifications were of no physical use to him—or if, as appears almost certain in the case of the naked skin, they were at first a positive disadvantage—we know that they could not have been produced by natural selection.

Before I move on to the next reason natural selection does not exist, I must mention sex, which, historically speaking, is one of Darwinism's greatest enigmas. Any organism that reproduces sexually is at a genetic disadvantage, because instead of transmitting 100 percent of its DNA to the next generation, it only passes on 50 percent.[57] This means that

to a degree, sexual reproduction *decreases* fitness and minimizes the "selfishness" of genes. Sex points to one of evolution's greatest mysteries—not only *why* it evolved but also *how* the act of sex, sexual differentiation, and sexual organs developed. These processes necessitate not only an explanation for a male developing physical sexual traits independent of and compatible with a female, but also the development of two distinct gametes (i.e., sperm and eggs) that are biologically compatible to form a zygote (a baby). The number of sexes is also an enigma in that we have two but are unable to clarify why we don't have three, six, or ten. Then, of course, there is the idea of sexual "selection" where, for example, females choose to mate with males because of certain secondary characteristics. This does not involve the non-random selection of random variants but is the result of a conscious choice by a conscious agent.

An explanation is only as valid as its details and the thing that it is trying to explain. According to Darwin's original formulation, natural selection presupposes to explain how life diversified but never explains how. Furthermore, natural selection itself is a misleading metaphor that both lacks an explanation for itself and was validated by a fraudulent analogy to artificial selection. As originally constructed in *Origin*, there were no concrete facts to support the theory of evolution by natural selection, only speculations. Therefore, natural selection it is not a real scientific phenomenon, only a yearning of the imagination predicated on fantasy. But we have only begun to scratch the surface of how unrealistic this fairy tale is.

Why Natural Selection Does Not Exist, Reason #2: Because natural selection is predicated on too many assumptions

Many may fail to recognize that evolution by natural selection only becomes plausible if one makes numerous assumptions that are not validated by the evidence. This makes the theory inherently flawed and transforms Darwinian evolution into a pseudoscientific ideology as opposed to a legitimate theory based on evidence. Even Darwin wasn't confident that his own theory was plausible. In *Origin of Species*, he writes:

> Whether natural selection has really thus acted in adapting the various forms of life to their several conditions and stations, must be judged by the general tenor and balance of evidence given in the following chapters.[58]

In the end, the only way to determine if natural selection has "acted" *is by assumption* because there really is no determinant way to clearly show that it *has* acted. Darwin *agreed* with this assertion and admitted that it is very difficult to quantify how many adaptations natural selection has actually preserved:

> It is very difficult to decide how far changed conditions, such as of climate, food, &c., have acted in a definite manner. There is reason to believe that in the course of time the effects have been greater than can be proved with clear evidence … When a variation is of the slightest use to any being, we cannot tell how much to attribute to the accumulative action of natural selection, and how much to the definite action of the conditions of life.[59]

Evolution by natural selection *assumes* that there is no limit to genetic variability and that hominids *can* evolve into humans. This is in direct conflict with concrete reality, which

tells us that indeed species do *change*, but they remain the same species. It *assumes* that changes observed in the fossil record were the result of evolutionary forces despite the fact that there is no way to go back into time and ascertain *why* organisms changed. It *assumes* that if we give the blind forces of nature enough time, distinct genetic differences can evolve and cause speciation. It *assumes* the erroneous concept that accumulation—the idea that the process of natural selection makes multiple linked, highly improbable smaller "steps" of genetic change—is more likely than a big, single step. This is logically, mathematically, and genetically unsound. Darwin explains his formulation of accumulation in *Origin*:

> Our ignorance of the laws of variation are profound … Whatever the cause may be of each slight difference between the offspring and their parents—and a cause for each must exist—we have reason to believe that it is the steady accumulation of beneficial differences which has given rise to all the more important modifications of structure in relation to the habits of each species.[60]

This statement is crucial because Darwin originally had no idea that variation among individuals was caused by genes, which do have *limited* variability. Hence, out of ignorance, he *assumed* that variations were potentially *unlimited* and thus could steadily "accumulate" over time in populations. Truly, we cannot fault Darwin for what he did not know, but the modern theory of evolution is cognizant of genetics, which does erect a biological wall that prevents unlimited change and thus how far accumulation goes. So, for example, when Darwin speculated how an eye developed, he truly had no idea of how astronomically complex even just *one cell* that constituted the eye really was:

> Although the belief that an organ so perfect as the eye could have been formed by natural selection, is enough to stagger any one; yet in the case of any organ, if we know of a long series of gradations in complexity, each good for its possessor, then, under changing conditions of life, there is no logical impossibility in the acquirement of any conceivable degree of perfection through natural selection.[61]

The point is that, for Darwin, there may not have been a *logical* impossibility for accumulation based on nineteenth-century knowledge and assumptions, but based on twenty-first-century scientific facts about genes and cellular complexity, there are many impossibilities actively working against accumulation (more on this shortly and in reason #3).

Additionally, in *The God Delusion*, Richard Dawkins writes about the indisputable improbability of evolution. He attempts to clarify said unlikelihood by appealing to the *process* of natural selection. He writes:

> [N]atural selection is a cumulative process, which breaks the problem of improbability up into small pieces. Each of the small pieces is slightly improbable, but not prohibitively so. When large numbers of these slightly improbable events are stacked up in a series, the end product of the accumulation is very improbable indeed, improbable enough to be far beyond the reach of chance.[62]

Dawkins then goes on to say that many do not understand the power of accumulation, or that evolution scales "Mount Improbable" in small, discrete steps. The problem with this logic (besides that fact that it still does not explain how natural selection precisely works) is that, while one improbable event is unlikely to happen, a *series* of improbable events is *even more unlikely* to happen. A person being struck by lightning is very improbable. A person being struck by lightning, surviving an earthquake, and then winning the lottery is so much more improbable that it is not plausible. And, as we will discuss, because mutations are the exclusive source of genetic novelty in natural selection, and because mutations are rare events,[63] climbing Mount Improbable is certainly *not* analogous to taking small leaps up a rocky cliff. It *is* analogous to leaping over countless un-crossable gulfs up a vertical slope. Moreover, taking small, incremental steps that are "stacked in a series" implies goal-oriented, purpose-driven behavior by a mindful, conscious agent:

> Natural selection is supposed to be mindless and hence incapable of pursuing a distant goal. If natural selection could preserve a presently meaningless mutation because it might become useful later on when other new mutations occur, this would imply that evolution is a purposeful process, supervised by a preexisting mind.[64]

Either natural selection is a blind watchmaker or it isn't. If it *is* a blind watchmaker, then no one climbs Mount Improbable because no one knows how to climb and no one is directed to go up. If natural selection *is not* a blind watchmaker, then what you are left with is a "supervised" form of evolution, which by definition is not evolution—it is a form of scientific mysticism.

Furthermore, accumulation *assumes* that all one needs is variation (by random mutation) compiled over vast oceans of time to provide a plausible explanation for the development of complex life from simple life. This attempts to explain life without providing an explanation for organismal form or information (form and information will be discussed separately in reasons number four and six).

There are many grandiose assumptions made by natural selection in that it is presumed to b e *causal* in effecting evolutionary change and speciation. In our current discussion, David Hume's skepticism about cause and effect assists us tremendously. Hume argued that we often make assumptions about cause and effect between two events in a particular relationship, but that connection is not necessarily true. Allow me to explain.

In his classic thought experiment,[65] Hume invites his readers to imagine a pool table with a player, a pool stick, a cue ball, and an eight-ball. If the player seeks to put the eight-ball in the corner pocket, the player looks, aims, adjusts, and then, with the swinging motion of the arm wielding the pool stick, he strikes the cue ball, which then strikes the eight-ball, which then lands in the corner pocket. The lesson is that many physical events happened to enact this end result—that is, there are events that *caused* other events.

What Hume then argued is that we can use our senses to see certain events transpiring in a contiguous relationship (one thing following another), but we *cannot* perceive the actual forces working to cause the events. For example, we can't actually sense the kinetic energy being transferred from the cue ball to the eight-ball when the former

strikes the latter. So, Hume posits, since we use our senses to determine what is really true, and we can't sense causality directly, then we cannot know causality with exactness.

The point must be made that Hume certainly was *not* denying that causality exists; rather, he simply made the case that knowing causality with precision is beyond human sensory experience and reason. Hume was content to simply declare that he did not know what caused the events.

I will discuss the fossil record separately in reason number seven, but for the present discussion, let's just embrace the reality that scientists use the fossil record as "proof" that natural selection worked in the past to *cause* speciation. With this in mind, let us use Hume's situation as an analogy. Let's say the eight-ball falling in the corner pocket is the survival of an individual.[66] For all times past, that event is memorialized by a fossil, which—beyond all reasonable doubt—tells us that that individual existed. That fossil does *not* tell us *why* that individual survived. In other words, we do not have access to the information that tells us what *caused* the eight-ball to fall into the corner pocket. This is the downfall of fossils—they preserve the remains of an organism but do not preserve the forces that preserved the organism. No one was there to observe the pool player using the pool cue to strike the cue ball, which knocked the eight-ball into place. And yes—naturally selection is a process that stretches the analogy even further because now, one must be able to observe an endless string of pool players knocking eight-balls into corner pockets.

Hence, in the case of evolution by natural selection, we may have a record of the end result of a supposed process (the fossil), but we are unable to know with certainty what *caused* the survival of said organism (natural selection or not). Because we can't sense causality directly, we cannot know causality with exactness, and therefore, we can only *assume* that what caused survival was natural selection. Causal connections that are assumptions are subject to neither verification nor falsification, so no one is in a position to say whether it was natural selection or the flying spaghetti monster that set events into motion. Consequently, we have no rational support for believing that natural selection was *causal* in survival; what we do have is postulation. And assumptions that are not subject to scrutiny are fairy tales that do not belong to the domain of science. Consequently, in Darwinism, what *does* exist is merely the *presupposition* of a connection between present evidence and what we infer from it (*a priori* reasoning). What does *not* exist is natural selection. In fact, causal inference motivates not only assuming effects but also expecting them. So, Darwin conceived of a cause (evolution by natural selection) and expected to see evidence of it everywhere in nature without ever explaining how the cause induces the effect. This fraudulent logic amounts to an impenetrable hoax because natural selection's effects can be observed everywhere, yet a precise explanation is nowhere to be found.

Before I move on to the third reason natural selection does not exist, what I hope is now clear is that there were many holes in Darwin's theory when it was first formulated. The objections made thus far have dealt primarily with what Darwin postulated in *Origin*, and even a cursory analysis of his book reveals these blatant flaws. As I mentioned in the introduction, if people actually took the time to read *Origin* for themselves, all of these problems would become immediately apparent. Sadly, many people do not take the reins of their own thinking and, as a result, allow others to interpret "the facts" for them. I

seriously doubt anyone can actually read *Origin* and have the same faith in a flawed theory as if they never bothered and passively accepted evolution as is and assumed it to be true.

Now that the logical objections to natural selection have been discussed, I will move on to reasons that natural selection does not exist based on modern science.

Why Natural Selection Does Not Exist, Reason #3: Because natural selection does not explain life at the biochemical level[67]

Natural selection claims to explain the diversity of life, but it does not—in clear and definitive terms—describe *how* it interacts with the molecular machinery that makes life possible. Without said elucidation, natural selection is powerless. Therefore, Darwinism's worst nightmare is when it is actually forced to explain step-by-step in precise detail of exact stages how the molecular machinery that operates in a single cell evolves into a regulated, conscious, and functional organism with billions of cells, dozens of interacting systems, and a degree of complexity so awe-inspiring that it makes an iPhone look like the crude tinkering of a toddler. Ultimately, natural selection does *not* provide an exact explanation for how complex biological systems are produced—it only speculates. This speculation relates not only to how adaptations survive, but to how the genes that code for those adaptations survive.

Granted, for a nineteenth-century scientist like Darwin, it was far easier to postulate that something external (natural selection) was causal in speciation. Why? Because back then, science was largely ignorant about how a cell works, the fact of DNA and the information it stores, and the mind-boggling intricacy of internal cellular machinery. And now that we do have an awareness of how complex life is, as well as a well-established knowledge of genetics, modern science has made a Darwinian explanation for molecular life astronomically *harder*.[68] Thus, with the large obstacles that science has erected, a Darwinian explanation for life is desperately anemic and fails to close many gaps in knowledge. But you don't have to take my word for it. Consider what English biologists Mae-Wan Ho and Peter Saunders state in the *Journal of Theoretical Biology*:

> It is now approximately half a century since the neo-Darwinian synthesis was formulated. A great deal of research has been carried on within the paradigm it defines. Yet the successes of the theory are limited to the minutiae of evolution, such as adaptive change in coloration of moths; while it has remarkably little to say on the questions which interest us most, such as how there came to be moths in the first place.[69]

John McDonald, a geneticist at the University of Georgia, says,

> Those [genes] that are obviously variable within natural populations do not seem to lie at the basis of many major adaptive changes, while those [genes] that seemingly do constitute the foundation of many, if not most, major adaptive changes apparently are not variable within natural populations.[70] [Italics were in the original.]

What this crucial statement from John McDonald tells us is that within populations, there are a bunch of genes that do vary, and those genes code for traits that are largely

unrelated to what we would call "big evolution." It also tells us that there are many genes that we expect to be the source of major evolutionary changes, but these genes *do not vary*. In plain English, this informs us that, as defined, natural selection does not provide a plausible explanation for macroevolution. Why? Because those genes that would cause organisms to "evolve" tend to stay exactly the same. Moths may change color for example, but moths stay moths.

Even Jerry Coyne, the man who wrote *Why Evolution is True*, states:

> We conclude—unexpectedly—that there is little evidence for the neo-Darwinian view: its theoretical foundations and the experimental evidence supporting it are weak.[71]

In his 1996 book, *Darwin's Black Box*, biochemist Michael Behe explains that life is based on molecular machines—some that serve as "highways" to move cargo from one place to another, others that act as ropes and pulleys, and others that act like switches. In short, Behe provides ample evidence that very complicated, highly sophisticated molecular machines control every cellular process. Hence, in order for natural selection to be a plausible explanation for the diversity in nature, we have to know how it works *specifically* when it comes to its "activity" on molecular machines.[72] Is there concrete evidence to suggest said mechanisms? No. In fact, un-crossable gulfs exist on the smallest scales of life. Behe writes:

> Biochemistry has pushed Darwin's theory to the limit. It has done so by opening the ultimate black box, the cell, thereby making possible our understanding of how life works. It is the astonishing complexity of subcellular organic structures that has forced the question, How could all this have evolved?[73]

He then goes on to say:

> If you search the scientific literature on evolution, and if you focus your search on the question of how molecular machines—the basis of life—developed, you find an eerie and complete silence. The complexity of life's foundation has paralyzed science's attempt to account for it; molecular machines raise an as-yet-impenetrable barrier to Darwinism's universal reach … Although Darwin's mechanism—natural selection working on variation—might explain many things, however, I do not believe it explains molecular life.[74]

What Behe then elucidates is how life works. He begins by explaining how vision works on the biochemical level in one cell. This intricate, highly complex pathway involves multiple steps and multiple molecules interacting in highly specific and organized ways;[75] it includes interaction with 11-*cis*-retinal, which changes its configuration in response to light; it involves the interaction of multiple protein molecules, including rhodopsin, metarhodopsin II, arrestin, transducin, and phosodiesterase; it involves membranes that tightly regulate sodium ions across channels; it involves transmission of electrical impulses to the brain; it involves "switches" that regulate which proteins are "on" or "off"; and it involves "resetting" the system when the process is complete. Of course, I have simplified the explanation to prove a point:

> The relevant steps in biological processes occur ultimately at the molecular level, so a satisfactory explanation of a biological phenomenon—such as sight, digestion, or immunity—must include its molecular explanation … Each of the anatomical steps and structures that Darwin thought were so simple actually involves staggeringly complicated biochemical processes that cannot be papered over with rhetoric. Darwin's metaphorical hops from butte to butte are revealed in many cases to be huge leaps between carefully tailored machines—distances that would require a helicopter to cross in one trip.[76]

Thus, how vision "works" inside of a cell involves highly complex and specified machinery. This poses a huge problem for the gradual development of complex systems. Why would natural selection go to all the trouble of selecting for all this complexity when it merely needs to settle for reducible simplicity? If the goal is mere survival, why go to all the trouble of fashioning an eye when all you would really need to do is stay with one cell and pass your DNA on by asexual reproduction? Why not have an eye that uses one protein instead of dozens?

"Darwinian biochemistry" had knowledge that stopped at the level of the gross cell. So, *The Origin of Species* was a speculative solution for a seemingly simple problem. Now that we do know how life actually works, explanations are still speculative. Because evolution by natural selection does *not* explain the origin of novel biochemical functions, it cannot explain life.

On top of all of this, Behe makes the additional claim that certain biological systems are *irreducibly complex*, meaning that they have many well-matched interacting parts that all work together to contribute to basic function. Thus, removing any one component makes the system shut down.[77] Examples of systems that are irreducibly complex include light-sensitive systems for vision, the cell's motor system, the blood clotting cascade, cellular transport, the immune system, and maintenance of cellular DNA. Even more examples of irreducible complexity include aspects of DNA replication, electron transport, telomere synthesis, photosynthesis, and transcription regulation.[78] In discussing each of these systems and after rigorous scrutiny, Behe concludes that each system could *not* have developed in a gradual Darwinian fashion *and* that there is a veritable silence from the scientific community as far as suggesting plausible alternatives. Behe describes these obstacles as "mountains and chasms" that block a Darwinian explanation of life.

Natural selection can only "act" on systems that are already operational—in other words, those that are useful *right now*. It provides no gradual explanation for how these systems developed, but evolution by natural selection demands such, lest it be called a miracle.[79] As Behe argues, as the irreducible complexity of a system increases, the likelihood of its developing gradually drops precipitously, since all parts have to be simultaneously functional for the system to work; this rules out an indirect or gradual acquisition of function. Additionally, for Darwinism to explain irreducible complexity, it requires an explanation for physical precursors[80]--like, for example, how phosphodiesterase came to operate in the vision system. It currently does not explain physical precursors; it is only assumed to act when phosphodiesterase already exists.

Furthermore, biochemistry clearly and plainly yells out that *any* biological system involving more than *one* cell (like an eye, muscle fibers, or a nervous system) is

"necessarily an intricate web of many different, identifiable systems of horrendous complexity."[81] This makes gradualism less plausible:

> The problem for Darwinian evolution is this: if only the end product of a complicated biosynthetic pathway is used in the cell, how did the pathway evolve in steps? If A, B, and C have no use other than as precursors to D, what advantage is there to an organism to make just A? … And where do we get A, B, and the rest? From the primordial alphabet soup, of course.[82]

> Origin-of-life workers have never demonstrated that the intermediates in the synthesis of [biochemical substrates] either would have or even could have existed in a prebiotic soup, let alone sophisticated enzymes for interconverting the intermediates.[83]

The essence of cellular life is regulation. This means that in the hypothetical pathway A → B → C → D, "B" would not look like an adaptation but a deviant to be eliminated. Consequently, cellular regulation seeks to maintain sameness, *not* to incorporate novelty:

> The problem for Darwinian gradualism is that cells would have no reason to develop regulatory mechanisms before the appearance of a new catalyst. But the appearance of a new, unregulated pathway, far from being a boon, would look like a genetic disease to the organism.[84]

Darwin himself wrote the following:

> If it could be demonstrated that any complex organ existed, which could not possibly have been formed by numerous, successive, slight modifications, my theory would absolutely break down. But I can find no such case.[85]

But, modern science *has* found such a case—in fact, it has found *many* cases inside of the cell.

So, 150 years after *Origin of Species*, what can modern science tell us about the evolution of molecular life? Not much:

> Molecular evolution is not based on scientific authority. There is no publication in the scientific literature—in prestigious journals, specialty journals, or books—that describes how molecular evolution of any real, complex biochemical system either did occur or even might occur. There are assertions that such evolution occurred, but absolutely none are supported by pertinent experiments or calculations … the assertion of Darwinian molecular evolution is merely bluster.[86]

In the end, Behe concludes the following:

> Biochemistry has, in fact, revealed a molecular world that stoutly resists explanation by the same theory so long applied at the level of the whole organism. Neither of Darwin's starting points—the origin of life, and the origin of vision—has been accounted for by his theory. Darwin never imagined the exquisitely profound complexity that exists even at the most basic levels of life.[87]

There have been many who have supposedly "debunked" or "disproved" what Behe claimed in *Darwin's Black Box*, but none of these attempts actually addresses Behe's challenge to provide a clear, step-by-step, testable explanation of how natural selection works at the molecular level. There are many who have simply restated the problem or speculated as to what may possibly happen but failed to provide concrete evidence. Ultimately, appeals to natural selection will not work if natural selection does not explain anything.

As molecular biologist James Shapiro wrote in *National Review*:

> There are no detailed Darwinian accounts for the evolution of any fundamental biochemical or cellular system, only a variety of wishful speculations. It is remarkable that Darwinism is accepted as a satisfactory explanation for such a vast subject—evolution—with so little rigorous examination of how well its basic theses work in illuminating specific instances of biological adaptation or diversity.[88]

Yes, it is remarkable that the presupposed scientific explanation for the diversity of life explains so little but can wishfully speculate so much. Behe has more faith than I do in natural selection because throughout all of *Darwin's Black Box*, he expresses his hope to see a more robust, precise explanation for evolution by natural selection at the biochemical level. He thus ends his book with positive expectations for the future. I only believe in what I know and what I can sense. What I know is that on the biochemical level, natural selection explains nothing. What I can sense is wishful thinking. So, when it comes to explaining life at the molecular level, because natural selection doesn't explain anything, it amounts to nothing, and it certainly is not a credible scientific theory. What it is, is a yearning of the heart that desires a natural explanation for life, but this yearning has no place in the realm of empirical science.

Why Natural Selection Does Not Exist, Reason #4: Because mutations are insufficient to explain genetic novelty

An appeal to chance is an appeal to nothing. In Part I, I discussed how natural selection works. I explained that, for it to function, there had to be heritability, or the fact that variation exists because of genetic variation. This genetic variation then affects the probability that an organism will leave offspring. If natural selection is described as the non-random selection of random variants, what is the entire selection process predicated on? Mutations, which are *random* changes in DNA. Random simply means by chance, and by chance means we don't know what really is the cause of something.

Because mutations are random, there is no force driving them. Thus, as the Japanese mathematical biologist Motoo Kimura argued in *The Neutral Theory of Molecular Evolution*:

> [T]he great majority of evolutionary changes at the molecular level, as revealed by comparative studies of protein and DNA sequences, are caused not by Darwinian selection but by random drift of selectively neutral or nearly neutral mutations.[89]

Natural selection only *preserves* what is working out well *right now*. Therefore, the *only* mechanism by which novel functionality can arise is by chance mutations. If there were no mutations, and thus no new genetic material, no new adaptations could arise and be preserved. It is irrelevant, then, if you *non-randomly* choose something that is generated *by chance*—the fuel that drives the process at its core *is chance*. The critical dilemma here is that chance is synonymous with ignorance or nothingness, so if natural selection is predicated on random mutations to fuel its engine, then what we are really saying is that natural selection is based on nothingness, and when you base a theory on nothing, what you're left with is nothing. Chance is not a cause. Chance is only an effect of mathematical computation. Chance is merely *descriptive*. It possesses no power, and therefore, it does not produce concrete effects in real life. Chance is not a causal agent, and it is meaningful to us only insomuch as it describes the likelihood of one scenario over another, like who is more likely to win a game. So, the argument that natural selection is bogus because it is based on chance is perfectly valid and reasonable because that is exactly what it is.

Even Darwin concurred that chance is insufficient to explain variety in nature:

> Mere chance, as we may call it, might cause one variety to differ in some character from its parents, and the offspring of this variety again to differ from its parent in the very same character and in greater degree; but this alone would never account for so habitual and large degree of difference as that between a species of the same genus.[90]

In *An Enquiry Concerning Human Understanding*, the famous skeptic David Hume wrote the following:

> Though there be no such thing as *Chance* in the world; our ignorance of the real cause of any event has the same influence on the understanding, and begets a like species of belief or opinion.[91]

Yet, despite the fact that chance is no thing and has no causal power, chance is conjured up to explain natural selection. Whenever a scientist appeals to chance as something causal, it is the ultimate magic trick that is meant to distract us from blatant ignorance. Consider what Richard Dawkins writes:

> A complicated thing is one whose existence we do not feel inclined to take for granted, because it is too "improbable." It could not have come into existence in a single act of chance. We shall explain its coming into existence as a consequence of gradual, cumulative, step-by-step transformations from simpler things, from primordial objects sufficiently simple to have come into being *by chance* … We must resort to a series of small steps, this time arranged sequentially in time.[92] [Emphasis added.]

Without random, chance mutations, there is nothing to *non*-randomly select. In other words, without chance mutations, the engine of natural selection has no fuel and doesn't go anywhere. Yet, there are many explanations that deny how totally dependent natural selection is on chance, and these explanations blatantly muddy genuine facts with veiled lies and flat-out deception.

> There is a big difference, then, between cumulative selection (in which each improvement, however slight, is used as a basis for future building) and single-step selection (in which each new "try" is a fresh one). If evolutionary progress had to rely on single-step selection, it would not have got anywhere … This belief, that Darwinian evolution is "random" is not merely false. It is the exact opposite of the truth. Chance is a minor ingredient in the Darwinian recipe, but the most important ingredient is cumulative selection which is quintessentially *non*random.[93]

Chance is the *major* ingredient in the Darwinian recipe because without random mutations, there is nothing to select. To suggest otherwise is to deny how evolution by natural selection is presumed to work; to suggest otherwise is not merely false—it is the exact opposite of the truth. An appeal to chance is an appeal to ignorance, and ignorance is defined by its lack—its lack of knowledge, its lack of understanding, and its lack of explanatory power.

Mutations tend to be enemies to life, not friends. Because mutations are random, they are not directed or lawful in any way. A mutation can be very small and refer to when one of the building blocks of DNA (the nucleotide) is switched to a different one. A mutation can also refer to an error in copying DNA that accidentally leaves out or duplicates a nucleotide or to a big chunk of DNA's (e.g., thousands of nucleotides) being left out or added. So, mutations can be tiny or big.

Inherited mutations come from a parent, are with an individual its entire life, and are located in essentially every cell of the body. Examples of inherited mutations are the genes that cause cystic fibrosis and sickle cell disease. *Acquired* mutations happen in distinct cells and usually happen because of an error in copying DNA (an internal cause). Far less common causes of mutations are external, like being exposed to radiation. The only way an acquired mutation can be passed along to the next generation is if a mutation occurs in a reproductive cell, like a sperm cell or an egg cell.[94] Only inherited mutations are guaranteed to be passed along to progeny, and these mutations tend to *reduce* fitness (like in the case of Lynch Syndrome or hemophilia). This means *acquired* mutations are the primary source of genetic novelty, which also means for natural selection to "act," a mutation must happen in a germ cell (sperm or egg) so that the DNA could be passed on. The catch is that mutations in germ cells would *not* code for an adaptation, yet mutations in somatic cells—which would code for an adaptation—*would not* be passed on.

It is crucial to understand that, at best, a single mutation can only produce a miniscule change in an organism[95] *and* that a cell recognizes a mutation *as an error*—this is why mutations that have significant effects are almost always dangerous.[96] Do you know what cancer is? In many cases, it is caused by *a mutation* that prevents a cell from regulating cell divisions, so tumors can thrive unchecked and spread. This explains why, in more than half of all cases of cancer, people have a *mutation* of the p53 gene.[97] This gene suppresses tumors, so when this gene is mutated, it cannot work as well, and cancer can flourish. Another example is Lynch Syndrome, which also increases a person's risk for developing many different types of cancers, including colorectal and endometrial cancer.[98] The cause of Lynch Syndrome is a mutation in the gene that fixes DNA that was copied incorrectly. The point is that DNA is like a computer code: It contains instructions for complex, highly specified biological functions. Mutations do *not* tend to

improve this functionality—they tend to destroy it, because undirected, random changes happen in very specific and deliberate gene sequences. This is why cells have built-in mechanisms that actively work to reduce the number of mutations that occur and to repair the mutations (e.g., direct repair, mismatch repair, excision repair, and recombination repair). Furthermore, mutations *never* increase genetic information. They are merely variants of existing genetic code.

In order to go from one simple cell in the middle of a pond billions of years ago to a modern human, what you need is an explosive increase in the amount of genetic information. Mutations tend to pollute existing genetic information. So then, how can natural selection explain how it preserves dangerous mutations that destroy functionality in order to beget beneficial adaptations that increase functionality? How does it explain the fact that mutations are actively worked against by the cell to be removed and repaired? If a blind watchmaker went through the process of non-randomly selecting deleterious mutations, why is it plausible to think he could "mold" complex life from simple life with "bad DNA"?

And, by the way, if the *source* of new genetic information is mutations, then what's the point of natural selection? Mutations make natural selection redundant. The only way to explain the origin of species is to explain the origin of variation—that is, novel genetic information that imparts a survival advantage. Natural selection does not explain the *origin* of new variation—it only explains the preservation of *existing* traits.

Do favorable mutations exist? Yes, purely favorable mutations do exist, in the same way that there are people who have been struck by lighting and survived. The most common scenario in reality is to have a mutation that benefits you in one regard while harming you in another. An example is inheriting sickle-cell disease, which does impart immunity to malaria but also increases the risk of early death due to clogging of sickled red blood cells in your arteries, among other causes. The point is that purely favorable mutations are astronomically rare, and to appeal to natural selection as a process that selects favorable mutations over time quickly approaches mathematical impossibility and a broad disconnect from plausibility:

> [F]avorable mutations are not only small but exceedingly rare, and the fortuitous combination of favorable mutations such as would be required for the production of even a fruit fly, let alone a man, is so much rarer still that the odds against it would be expressed by a number containing as many naughts as there are letters in the average novel, "a number greater than all the protons and electrons in the universe."[99], [100]

Random mutations cannot explain specified biological function. In a well-known paper published by the scientist and philosopher Stephen Meyer,[101] he addressed the problem of the origination of organismal form[102] (organisms' specific, unified anatomical pattern) from a theoretical standpoint. His primary focus was to look at the Cambrian explosion, a relatively brief geological era when many new animals with many new, different body plans arose. What was his ultimate conclusion? That random genetic mutations fueling natural selection do not provide a plausible causal explanation for the origination of complex life from simpler forms of life. How did Meyer reach this conclusion? By establishing that current research demonstrates that proteins are highly *specified* in regard

to how they work in a cell, and this specificity is intimately related to biological function—what the protein actually does in a cell to animate life. A highly specified protein requires highly specified genes.[103] If those genes are changed (by mutation), then a highly specified protein is no longer specified, it can't perform properly, and life falls apart. Hence, Meyer's basic conclusion is that, for simple life (e.g., one cell) to evolve into complex life (e.g., people), natural selection does not provide a proper causal explanation because mutations do not explain novel, specified biological functions in advanced life.

The fact of the specificity of genes that code for specified proteins is a gargantuan barrier *against* natural selection because the odds of mutations generating new genetic information or randomly assembling a functional sequence are extremely unlikely. Let's say, for example, that a person has a gene called "Red" and this gene codes for a Red protein that carries oxygen in the blood. If the code for Red is *ATCG*, this means that this specific genetic sequence codes for a specified, functional protein with a specific amino acid sequence and a specific three-dimensional structure (more on amino acid sequences and protein structures later). The Red protein will only work in the blood if it is coded by *ATCG*. If *ATGC* changes through mutation (e.g., *AAGC*), what you have left is *different* than what was specified, the resulting protein *loses* functionality, and the person dies because of lack of oxygen. This is exactly what random mutations tend to do: destroy function by destroying what is already specified. This is validated by the scientific literature, which demonstrates that proteins with active amino acids *cannot* vary without functional loss.[104] Of course, it is worth repeating: Natural selection cannot generate new gene sequences—all it can do is preserve a sequence once it exists.

Mutagenesis experiments reveal that by chance, the likelihood of obtaining the correct gene sequence that specifies biological function in a short protein is roughly 1 in 10^{65}.[105] This correlates to other studies that have demonstrated similar odds (1 in 10^{77}) of random mutations generating the genetic information required for specified proteins.[106] What these odds basically mean is that a random mutation generating the genetic data needed to code for a functional protein is a scenario possible only in the imagination and not in reality—it is analogous to flipping a quarter on Pluto and hoping for it to land precisely in a specific parking meter machine in the middle of Times Square.

Ultimately, the proteins that make life possible are very sensitive to change, and biological function tightly limits genetic variability. Furthermore, when a protein has a change in one amino acid, this tends to adversely *alter* function, but when a protein has changes in many amino acids, this invariably leads to *loss* of function.[107] But the march of macroevolution requires just that: many changes in many amino acids. The unavoidable reality is that the specificity of proteins *themselves* suggests they could not have arisen by a blind, undirected mechanism that is reliant on chance: natural selection.[108]

Meyer continues to mount evidence against natural selection as a plausible mechanism for speciation by pointing out that random mutations would also have the difficulty of supplying information for new *types* of cells, and these new types of cells would require new specialized proteins that operate in new specialized *systems*. Such a feat requires *coordination* of biological function that far exceeds the mere generation of new random mutations—such a process requires the selection of integrated systems, not genes.

As Meyer writes:

> Natural selection selects for functional advantage. But new cell types require whole systems of proteins to perform their distinctive functions. In such cases, natural selection cannot contribute to the process of information generation until *after* the information necessary to build the requisite *system* of proteins has arisen. Thus random variations must, again, do the work of information generation—and now not simply for one protein, but for many proteins arising at nearly the same time.
>
> Yet the odds of this occurring by chance alone are, of course, far smaller than the odds of the chance origin of a single gene or protein—so small in fact as to render the chance origin of the genetic information necessary to build a new cell type (a necessary but not sufficient condition of building a new body plan) problematic given even the most optimistic estimates for the duration of the Cambrian explosion … the number of changes necessary to produce a new protein greatly exceeds the number of changes that will typically produce functional losses … Evolving genes and proteins will range through a series of nonfunctional intermediate sequences that natural selection will not favor or preserve but will, in all probability, eliminate. When this happens, selection-driven evolution will cease.

Meyer's ultimate conclusion, then, is that the origin of novel genetic information that codes for specified biological function exposes a gross lack of explanatory power of natural selection. For modern evolutionary theory, even if new genes arise from old ones *or* if new genes arise from non-coding sequences, the same barrier to novel information generation still exists. If a genetic algorithm of any kind seeks to generate a specified biological function, it requires some form of direction or foresight—in other words, it cannot be purposeless and blind, which is exactly what natural selection is.

Mutations are insufficient to explain genetic novelty because no matter how they are defined or described, they will be reliant on chance, which is nothingness. Generally speaking, mutations also tend to be enemies to life, and no plausible explanation exists as to how natural selection acts to use undirected mutations to manufacture not only specified genetic information, but also proteins with specified biological functions that work in specialized cells that collaborate as members of integrated biological systems.[109] Does natural selection adequately address or explain any of these essential phenomena? It does not because a nineteenth-century philosophical assumption is incapable of keeping up with modern science. Natural selection lacks substance and real explanatory power because it does not exist.

Why Natural Selection Does Not Exist, Reason #5: Because adaptive power is internal, not external[110]

The author of *Darwin's Black Box*, Michael Behe, wrote another book titled *The Edge of Evolution*. In that book, Behe does what no other skeptic (to the best of my knowledge) of natural selection does: describe where natural selection has actually worked. Behe describes how sickle cell disease developed in Africa. He writes:

> It is crystal clear that the spread of the sickle gene is the result of Darwinian evolution—natural selection acting on random mutation.[111]

In this case, those individuals with the sickle gene survive malaria, and most of those without it do not. However, Behe concludes his book by clarifying what evolution can and cannot do, and what it can do is truly modest. For the sickle gene (which is something relatively simple that involves a change where two proteins join together), evolution is plausible. But most of the other impressively complex structures of life, he says, are far beyond a Darwinian explanation.

This evokes the question, Is the survival of those with the sickle gene evidence of natural selection?

Let's say there's a man called Cletus. Cletus lives in an environment with other men and women who live their own lives. Now, let's say that Cletus has a unique gene called "anti-X" that codes for a special protein that floats around in Cletus's bloodstream. Then, a catastrophic pathogen—Virus X—breaks out and kills 99 percent of the people in Cletus's environment *except* those people who have the "anti-X" gene. Why is that? Because that gene codes for a specific protein that makes those people immune to Virus X. In other words, there was a unique environmental stress, and only certain people (like Cletus) who had a minor adaptation (the "anti-X" gene) were able to survive. Thus, people who were "anti-X" had a survival advantage, and therefore they were the most "fit," defined by their survival. Now, here is the question: What *caused* Cletus to survive? Every effect must have a cause, so what ultimately caused survival (the effect)? Was it something in the environment? Well, no, because the environment killed almost everyone. We know that Cletus survived *because of internal adaptive power*—that is, because of a protein coded by his DNA. Had Cletus not had the "anti-X" gene, he would have died, and this explains why everyone else lacking this adaptation perished. The environment is not a great savior that "selects" survivors. The environment is the problem that killed people.[112] There was something specific in the environment (Virus X) that merely *exposed* an internal trait, and that *internal trait* is what caused certain individuals to survive. Survival was not ultimately caused by something external acting *on* Cletus, and to ascribe such is an exercise in imagination, not science. Cletus had a built-in function that caused him to survive, and his survival was defined by his internal adaptive power *interacting* with the environment. So, no, internal adaptive power does not mean agents are independent of the environment. It simply means that they can have many interactions in said environment, but what is ultimately causal in survival is *internal*, not *external*.

And guess what? If Virus X never existed, Cletus would still have an inborn genetic ability to resist Virus X and be able to pass that gene on to his children. This ability is independent of his environment. What *is* quantifiable is the fact that Cletus has a gene that codes for a trait, and the effect is immunity to Virus X. What *is not* quantifiable is the "spirit" of natural selection. So is the spread of the sickle gene evidence of natural selection? Absolutely not. It is evidence of individuals with the inborn ability to reproduce and pass on their DNA to their offspring, *regardless* of whether they are exposed to malaria. To invoke the mystical power of natural selection, one would actually have to demonstrate in clear, specific, and defined ways *how* natural selection actually works on the cellular level to affect survival. As the previous reasons have

described, no such explanation exists, and, as I have described in the last example, no such explanation is needed because adaptive power is internal.[113]

Additionally, natural selection dismisses the reality that organisms are causal agents that *act*. Ultimately, the functional power of an organism exists *within* an organism, not *without*. An agent that is intelligent and conscious is the *cause*. The *effect* is organisms (which have variable traits) acting to reproduce and pass on those traits that are heritable. Because an organism *already has* a built-in mechanism that imparts abilities, an external pressure is no longer needed, nor a nebulous process that works through time. If "selection" is defined as an external force that mediates a process involving internal mechanisms, what natural selection is really saying is hogwash—it is taking the responsibility as an external pressure for that which already exists internally.[114] Natural selection then is nothing more than a bait-and-switch where an imaginary external force steals the credit for work it never does.

Reality tells us that whether you are a lion in the wild or a human in New York City, there are many environmental conditions that we must deal with. We do not live in paradise, so there is scarcity in the environment that every living thing must deal with. Seen in this light, the environment isn't there to help us—it is what limits us. Yes, nature is blind, which is exactly why it has no interest in whether organisms survive or not. Organisms are therefore active, conscious agents that of course act *in* their environments but are not drones that are passively molded *by* it.[115],[116]

Reality can tell us many things about the internal adaptive power that organisms have because they can be detected, observed, measured, and verified—in other words, internal adaptive power can be explained. The only way to discern whether an external adaptive power exists is to do the same, but what I have demonstrated thus far is that natural selection does no such thing. Why? Because it does not exist and therefore, a person is incapable of explaining how it actually works.

Even when scientists are honest and reach this conclusion—that natural selection does not exist—they tend to do so in cryptic, concealed terms. For example, cognizant of their extensive research and documentation of the elaborate *inborn* molecular mechanisms controlling mouse coat color, Harvard researchers paradoxically say:

> To unravel evolutionary mechanisms in the wild, we must estimate the fitness advantage of adaptive alleles and infer their source, either as new or preexisting variation. In the Sand Hills of Nebraska, deer mice (*Peromyscus maniculatus*) have evolved a dorsal coat that closely matches their local habitat … which is probably due to selection against avian predation.[117]

But what about antibiotic-resistant bacteria? Isn't that positive evidence of natural selection working to "select" for certain bacteria over others? That's a good question. In my own field, we actively work not to overprescribe antibiotics because of the real threat of antibiotic-resistant bacteria (e.g., MRSA). Some strains of the HIV virus have also demonstrated resistance to anti-retroviral drugs. Do any of these observable phenomena lend support to the theory of evolution by natural selection? In short, no—the bottom line is that all of these changes involve small molecular changes, and none lend support to macroevolution. Bacteria that acquire antibiotic resistance remain bacteria, and an HIV virus that acquires resistance to medication remains a virus. *Acquire* in no way shape or

form implies *evolution*. In fact, when we look under a microscope and observe *how* bacteria actually become antibiotic-resistant, we see that it has nothing to do with a force that "selects." It has everything to do with pre-existing mechanisms—that is, the predominant means of acquisition is heterologous resistance genes from external sources.[118] In plain English, that means bacteria primarily gain antibiotic resistance by getting resistance genes from other bacteria.[119] This happens, for example, when bacteria engage in a mating process called conjugation and resistance genes are transferred from one bacterium to another; viruses pass resistance genes to bacteria by "infecting" them with new genetic material; bacteria can also absorb free-floating "naked" DNA, and old DNA that codes for resistance can be scavenged from dead or degraded bacteria.

The end result of these processes is that those bacteria that are resistant survive in the midst of antibiotics, so they divide and multiply. Because mechanisms of DNA transfer and exchange already exist, bacteria will absorb heterologous DNA *regardless* of whether antibiotics are used or not. All antibiotics do is kill off all those bacteria that are *not* resistant. Hence, in this case, the environment does not "select" but is a lethal problem. Neither is anything external causal in inducing antibiotic resistance.

The point of all of this is to re-emphasize the fact that the adaptive power of survival can be explained by genes *that already exist*. There is no need to resort to an external mechanism when a clear cellular explanation is apparent. And, by the way, the use of antibiotics is in no way shape or form analogous to natural selection. Why? Because the use of antibiotics is not natural. *Designed* antibiotics are deployed in a system by a conscious agent (like a doctor or an experimenter), and that agent has an intelligent purpose for giving the medication in the first place. Human interference with or in the environment by definition makes selection *non*-natural.

Because adaptive power is internal, and external adaptive force is neither causal nor necessary. Hence, natural selection does not exist.

Why Natural Selection Does Not Exist, Reason #6: Because natural selection does not account for information

We will now return to Alfred Russell Wallace and his nineteenth-century critique of Darwin. He wrote that human consciousness poses a huge barrier to evolution by natural selection since animals (that we presumably evolved from) lack the intellectual abilities that humans do. Wallace says there is a huge difference between the *structure* of life and the *essence* of life:

> It would certainly appear in the highest degree improbable, that the whole animal kingdom from the lowest zoophytes up to the horse, the dog, and the ape, should have been developed by the simple action of natural laws, and that the animal man, so absolutely identical with them in all the main features and many of the details of his organization, should have been formed in some quite other unknown way. But if the researches of geologists and the investigations of anatomists should ever demonstrate that he was derived from the lower animals in the same way that they have been derived from each other, we shall not be thereby debarred from believing, or from proving, that his intellectual capacities and his moral nature were not wholly developed by the same process. *Neither*

> *natural selection nor the more general theory of evolution can give any account whatever of the origin of sensational or conscious life*. They may teach us how, by chemical, electrical, or higher natural laws, the organized body can be built up, can grow, can reproduce its like; but those laws and that growth cannot even be conceived as endowing the newly-arranged atoms with consciousness. But the moral and higher intellectual nature of man is as unique a phenomenon as was conscious life on its first appearance in the world, and the one is almost as difficult to conceive as originating by any law of evolution as the other. [Emphasis added.]

Wallace says that in nature we find evidence of design, since all things seem to work together for a purposeful end. He attributes this design to a "Higher Intelligence" and relies, for example, on the idea that grain is more than grain but is also suitable for wheat in bread. In other words, there is a degree of functionality that *transcends* structure, and natural selection presupposes to operate only on the structure of genes:

> This subject is a vast one, and would require volumes for its proper elucidation, but enough, we think, has now been said, to indicate the possibility of a new stand-point for those who cannot accept the theory of evolution as expressing the whole truth in regard to the origin of man. While admitting to the full extent the agency of the same great laws of organic development in the origin of the human race as in the origin of all organized beings, *there yet seems to be evidence of a Power which has guided the action of those laws in definite directions and for special ends.* And so far from this view being out of harmony with the teachings of science, it has a striking analogy with what is now taking place in the world, and is thus strictly uniformitarian in character. Man himself guides and modifies nature for special ends. The laws of evolution alone would perhaps never have produced a grain so well adapted to his uses as wheat; such fruits as the seedless banana, and the bread-fruit; such animals as the Guernsey milch-cow, or the London dray-horse. Yet these so closely resemble the unaided productions of nature, that we may well imagine a being who had mastered the laws of development of organic forms through past ages, refusing to believe that any new power had been concerned in their production, and scornfully rejecting the theory that in these few cases a distinct intelligence had directed the action of the laws of variation, multiplication, and survival, for his own purposes. We know, however, that this has been done; and we must therefore admit the possibility, that in the development of the human race, a Higher Intelligence has guided the same laws for nobler ends. [Emphasis added.]

Furthermore, Wallace ends by saying that evolution by natural selection only seeks to explain the *physical* being, not the *intellectual* or the *moral* one:

> Such, we believe, is the direction in which we shall find the true reconciliation of Science with Theology on this most momentous problem. Let us fearlessly admit that the mind of man (itself the living proof of a supreme mind) is able to trace, and to a considerable extent has traced, the laws by means of which the organic no less than the inorganic world has been developed. But let us not shut our eyes to the evidence that an Overruling Intelligence has watched over the

> action of those laws, so directing variations and so determining their accumulation, as finally to produce an organization sufficiently perfect to admit of, and even to aid in, the indefinite advancement of our mental and moral nature.

The French philosopher and mathematician Descartes once said that there are two substances in the cosmos: one material, and the other mental. At one point in the universe, minds did not exist, and then at another point, minds did. How did this happen? The mind—including thoughts, consciousness, and will—contains nonmaterial *information* content that itself is separate and distinct from the material *structure* of DNA. Natural selection works only at the level of structure and thus fails to explain this nonmaterial content. The reality of the matter is, there is information within us that cannot be neatly mapped onto material reality.

George C. Williams is a pioneer in the field of gene selection theory. He put forth the idea that life contains something very significant—nonmaterial information. He writes:

> Evolutionary biologists have failed to realize that they work with two or more less incommensurable domains: that of information and that of matter … These two domains can never be brought together in any kind of the sense usually implied by the term reductionism. … The gene is a package of information, not an object. The pattern of base pairs in a DNA molecule specifies the gene. But the DNA molecule is the medium, it's not the message. Maintaining this distinction between the medium and the message is absolutely indispensable to clarity of thought about evolution.
>
> Just the fact that 15 years ago I started using a computer may have had something to do with my ideas here. The constant process of transferring information from one physical medium to another and then being able to recover the same information in the original medium brings home the separability of information and matter. In biology, when you're talking about things like genes and genotypes and gene pools, you're taking about information, not physical objective reality.[120]

Matter does not equal information. Truly, the medium and the message are two separate and distinct things. Darwinian evolution by natural selection attempts to explain the medium (genes) but not the message—for example, by way of analogy, natural selection attempts to explain the organization of elements that compose a microchip but not the coding that allows you to do a Google search. A computer that lacks information is just a shiny box that does nothing when you plug it in (it won't even turn on). Similarly, in a book, the medium (the molecules of ink on molecules of paper that form symbols) has nothing to do with an alphabet, language, and the message that an author wants to convey[121] (in fact, ask yourself a probing question: Can you explain language starting from an atom and working your way up?). Hence, because information is not reducible to matter, a theory that explains life must also explain this information—something that Darwin's theory does not do. To validate this point, let's take a look at how proteins work.

Proteins are the true workhorses of life, not DNA. DNA merely contains the information required to make proteins, and once built, they act as the "machines" that build cells,

work inside those cells and execute the reactions necessary for life. One cell has thousands of different proteins that perform myriad functions. The reader ought not to forget that the information in DNA is *specified* information. By specified I mean DNA codes for a very specific protein, which has a very specific biological function. Without this specified information, the protein cannot work, and life crumbles.

In order to appreciate just how specified the information in DNA is, let's take a brief look at protein form. DNA codes for amino acids (like glycine, alanine, and lysine), and twenty different amino acids (AAs) in different combinations make up essentially all proteins. Proteins in the human body can have as few as dozens of AAs or as many as thousands. Before AAs can become a functional "protein machine," they have to be joined by chemical bonds on the ends of individual AAs. When all of the AAs are lined up in a chain, this is called the protein's *primary* structure. Based on the primary structure, the protein is held in shape by hydrogen bonds into a *secondary* structure, which is either an α helix or a β pleated sheet. The *tertiary* structure is the three-dimensional shape of a protein. The tertiary structure has a single AA chain "backbone," may have multiple contained secondary structures, and usually has many AA side chains that bond with one another in a number of ways. You can imagine a tertiary structure as a three-dimensional piece of a jigsaw puzzle. This piece has a very specific shape that "fits in" exactly with other pieces. Tertiary structures are called subunits, and when a bunch of tertiary subunits precisely fit into one another, this is called a protein's *quaternary* structure. The quaternary structure (or a polypeptide) functions as a unit. Generally speaking, when we talk about functional biological proteins, we are referring to their quaternary structures.

Sometimes, as in the case of hemoglobin (the polypeptide that carries oxygen in your blood), the quaternary structure has capabilities that the tertiary structure does not. So, a hemoglobin polypeptide, which has four subunits, is able to transport oxygen. Each of the subunits individually is *not* able to carry oxygen. Likewise, how our immune system works involves an immune cell (which has a specific shape) matching the shape of another protein so the two can bind. Without this precise matchup, the system shuts down because the minimal function required to work no longer exists.

How is all this information about proteins relevant? It is relevant because natural selection does not offer an explanation for any of it. The only thing natural selection offers is an anemic explanation at the level of material; it does not offer an explanation for either the message or how that information is organized to orchestrate life: the complex specified information that codes for functional proteins, that codes for the interactions among proteins, that codes for enzymes that genes require to function,[122] that codes for transcription and translation,[123] and that organizes the interactions of functional proteins into a coherent system. It is not plausible that information encoded by the genetic material in DNA could have been assembled by blind forces because, figuratively speaking, specified information has its eyes wide open.

Truly, DNA is a code, and whenever we see a code in life, there is always an explanation that involves intelligence separate and distinct from the code. Thus:

> Can the origins of a system of coded chemistry be explained in a way that makes no appeal whatever to the kinds of facts that we otherwise invoke to explain

> codes and languages, systems of communication, the impress of ordinary words on the world of matter?[124]

I invite the reader now to engage in a thought experiment: Can you think of anything in reality that contains information that does *not* involve an intelligent designer? Here are a few information sources to get you started: a book, a smartphone, and a vinyl record.

DNA contains information that codes for life. This code has a specific message that can only be interpreted by machines that can read this biological language and therefore permit life. Because natural selection provides no elucidation about how the information developed or was organized, it is therefore reasonable to say that natural selection does *not* offer a plausible explanation for the diversity of life. It is *not* reasonable to suggest that meaningful, complex, specified information is the result of mindless, blind forces without forethought. Therefore, because natural selection lacks explanatory power for the non-material information necessary for life, it does not exist.

Why Natural Selection Does Not Exist, Reason #7: Because the fossil record[125] does not provide credible evidence for evolution by natural selection

We are now in the twenty-first century looking back to past epochs trying to find reasonable assurance that evolution by natural selection is the means by which speciation happened. We are *not* looking to the present to observe that species change yet remain the same species; we are looking *back* in search of concrete evidence that demonstrates how one species gradually evolved into another. Consequently, looking at the fossil record, how do we know with certainty that natural selection preserved favorable variations, and thus was *causal* in the evolution of species? *We don't*. The definition of fitness (or that natural selection has worked) is survival, which is an endpoint that can be defined. Therefore, all organisms survive (the effect) for a reason (the cause), but there is no objective way to determine *why* the organism survived. Every effect must have a cause, but effects are not the same events as their causes. A cause may therefore occur without its usual effect. We can make causal *inferences* to say that natural selection preserved favorable traits, but there is no way *a posteriori* to properly define that connection. Many proponents of evolution by natural selection *presume* it to be true and therefore presume it to be causal *a priori*.

Legitimate theories "put themselves on the line," meaning they are vulnerable and are open to testing and falsification—that is, someone designs an experiment in order to prove the theory wrong.[126] The fossil record is incapable of doing any of these things. If we therefore *assign* meaning to the fossil record, we can manufacture whatever we would like it to tell us and no one can either prove or disprove said declarations. The fossil record cannot be tested; it can only be described.

Certainly, we *cannot* test by looking for confirmatory (or expected) evidence in the fossil record—like the mere fact of change or what we may speculate is evidence of speciation. Why can't we do that? For three reasons. The first is that history is not science. The fossil record is a *historical* record[127] and nothing more. History is neither testable nor reproducible. The fossil record may tell us *that* certain things changed; it does not tell us *why*. Organisms are preserved; their environment is not. If we were to prove that organisms survived in their environment *because* of a better adaptation *in* their

environment, how are we to make this call without the environment? This is what history is: telling us now what happened then. If we fill in historical gaps with what we think may have happened, then we have stepped out of science and into historical revisionism.

The second reason is that if we *begin* with Darwin's theory and then look back to what the fossil record says *about it*, this is not making an inference to the best explanation—rather, it's making assumptions about a pre-determined conclusion. The fossil record ought to speak for itself. What we ought to do is *begin* with the facts—the fossil record—and then, analyzing it *as a whole*, ask ourselves, "What does it tell us?"

The third reason is that the fossil record is an explanation "of the gaps." Scientists claim that *micro*evolutionary changes are readily observable in a lifetime, but it would be unreasonable to expect to see *macro*evolutionary changes in a lifetime because that process takes much, much longer—approximately "100,000 to 5 million years to evolve two reproductively isolated descendants."[128] So, on the one hand, macroevolution cannot be observed, cannot be verified, and *neither should it be expected* in the lifespan of a normal human. Essentially then, we are told that evolution by natural selection explains the diversity of life, and that it made big changes in the past, but we should not expect to observe it making concrete macroevolutionary changes in reality. There is therefore a huge gap between what Darwinism claims and what reality is actually capable of proving. What explains *away* this gap? Not science, but history, by means of the fossil record. I could similarly "explain" that aliens strategically planted fossils on planet Earth millions of years ago and then left never to be seen again, so you ought not to expect tiny green men in the present. This is a claim that can be neither verified nor falsified. Hence, when "science" essentially informs us that empiricism and direct observation are in vain, suspicions should be raised.

What *does* reality tell us? That we *can* expect to find genetic variation for many traits, but genetic variability in no way, shape, or form confirms that evolution is true; it only confirms that genetic variability is real. Reality also tells us that when we, in the present, without bias, consider the fossil record *as a whole*, it refutes Darwin's theory in clear and unfiltered terms.

If evolution by natural selection were true, universally, we would expect to see primitive forms of organisms way, way back in the fossil record and then slowly over time observe small, *incremental* changes. The fossil record as whole reveals the *sudden* appearance of different classes of animals that are *fully formed*.[129] This is most evident in the "Cambrian explosion," which refers to the geologically abrupt appearance of novel animals about 530 million years ago. Here, about twenty different animal phyla appeared within a narrow window of geologic time.

In his 2002 book, *Icons of Evolution*, the molecular geneticist Jonathan Wells summarizes that because the Cambrian explosion suggests an abrupt appearance of diverse and highly developed fauna in the Paleozoic era, it is a mystery of the geological record. The record testifies to the fact that fossils seemingly were planted there *without* any gradual transitions:

> The evidence for Darwinian macroevolutionary transformations is most conspicuously absent just where the fossil evidence is most plentiful—among marine invertebrates. If [Darwin's theory] were true, and if the correct

> explanation for the difficulty in finding ancestors were the incompleteness of the fossil record, then the evidence for macroevolutionary transitions would be most plentiful where the record is most complete.[130]

Niles Eldrige, a leader in the field of paleontology states the following:

> When we do see the introduction of evolutionary novelty, it usually shows up with a bang, and often with no firm evidence that the fossils did not evolve elsewhere! Evolution cannot forever be going on somewhere else. Yet that's how the fossil record has struck many a forlorn paleontologist looking to learn something about evolution.[131]

Fossils showing up with a "bang" not only refutes the idea of gradual evolution; it also highlights the gross absence of transitional fossils, which would be "intermediates" in the gradual evolution between species. Furthermore, the fossil record is clear that those new organisms dated to the Cambrian explosion also have no antecedent forms.[132] The maxim *natura non facit saltum*—that is, nature does not leap—readily applies here. Darwin had "no satisfactory answer"[133] as to why there was a scarcity of fossils before the Cambrian explosion, and neither does modern science.[134]

Accordingly, consideration of the whole fossil record only lends support to Darwinian evolution if a preconceived idea is forced upon the record and all contrary evidence is ignored. In this case, contrary evidence is the entirety of the fossil record. Darwin himself expressed the lack of supporting evidence to be found in fossils:

> But, as by this theory innumerable transitional forms must have existed, why do we not find them embedded in countless numbers in the crust of the earth? … I believe the answer mainly lies in the record being incomparably less perfect than is generally supposed.[135]

In fact, history tells us that Darwin had a rough idea about his theory in the 1840s, long before he took his famous voyage on the Beagle. The point to be made is that Darwin did not tour the Galapagos Islands and *then* construct his theory of evolution; instead, he formulated an idea and then searched for confirmatory evidence.[136] This is an idea more fully developed in Gertrude Himmelfarb's *Darwin and the Darwinian Revolution* based on historical evidence and correspondence that Darwin himself penned.

Darwin did express his hope that, in the future, numerous transitional varieties would be found, although the geological record as a whole is "extremely imperfect."[137] And what does the modern record reveal? The same thing it did in Darwin's time—a gross lack of evidence in support of Darwinism:

> The geological record did not support universal macroevolution in Darwin's time and it does not do so today.[138]

According to Dr. Jerry Coyne, the fossil record that we now have access to—*at best*—details 1 percent of all species that ever lived:

> Over the first 80 percent of the history of life, all species were soft-bodied, so we only have a foggy window into the earliest and most interesting developments in evolution and none at all into the origin of life … The total

> number of species that ever lived on Earth has been estimated to range between 17 million and 4 billion. Since we have discovered around 250,000 different fossil species, we can estimate that we have fossil evidence of only 0.1 percent to 1 percent of all species—hardly a good sample of the history of life![139]

Is 1 percent enough? Do we have enough fossils to give us a good idea of how evolution presumably proceeded? There is no way to tell unless we suppose. The best we can do is let the evidence speak for itself.

What about all the transitional forms that are popularized in the media? Well, what scientists label "transitional" ends up being less an exercise in objective science and more an experiment in subjective opinion. Essentially, scientists today lack any reasonable confidence to label a fossil as "transitional" or "intermediate" and often resort to wishful thinking:

> Whether a humanlike fossil is named as one species or another can turn on matters as small as half a millimeter in the diameter of a tooth, or slight differences in the shape of the thighbone. The problem is that there are simply too few specimens, spread out over too large a geographic area, to make these decisions with any confidence.[140]

This overly subjective method is not novel, since the same ethos of subjectivity dominated in the nineteenth century. Darwin writes:

> It is all-important to remember that naturalists have no golden rule by which to distinguish species and varieties; they grant some little variability to each species, but when they meet with a somewhat greater amount of difference between any two forms, they rank both as species … It is notorious on what excessively slight differences many palaeontologists have founded their species; and they do this more readily if the specimens come from different sub-stages of the same formation.[141]

But is it even reasonable to expect many, intermediate (or transitional) fossil remains as proof of evolution by natural selection? According to Darwin, no, because that's exactly how natural selection works: to *preserve* those individuals that are best adapted for survival and to *eliminate* those that have *the least* favorable variations.[142] This is very convenient, in that the very thing that would lend positive evidence to gradual evolution (intermediates) is the very thing that natural selection discards. Darwin's explanation for the lack of intermediates didn't amount to an explanation at all, just the reaffirmation of an inadequate record. Thus, although one may look for intermediates and common ancestors, one should seldom expect to find any:

> [W]e have no right to expect to find, in our geological formations, an infinite number of those fine transitional forms which, on our theory, have connected all the past and present species of the same group into one long and branching chain of life. We ought only to look for a few links, and such assuredly we do find—some more distantly, some more closely, related to each other; and these links, let them be ever so close, if found in different stages of the same formation, would, by many paleontologists, be ranked as distinct species.[143]

Darwin did suppose how graded forms would appear by describing precise, sequential geological happenings. What he concluded is that it would be a "rare contingency" to get a perfect gradation between two forms.[144] As a result, according to Darwin's own formulations, what would be *the most* beneficial to provide evidence for natural selection *is a fossil record robust with transitional forms*, but such a gracious gift is not only exceedingly rare, but also ought not to be expected, and in reality, does not exist.

One of the most intriguing statements that Darwin made in *Origin* in regards to the fossil record is as follows:

> Because we continually overrate the perfection of the geological record, and falsely infer, because no certain genera of families have not been found beneath a certain stage, that they did not exist before that stage. In all cases positive paleontological evidence may be implicitly trusted; negative evidence is worthless, as experience has so often shown.[145]

Likely, this statement represents the strongest evidence for Darwin's departure from objective scientific inquiry and him diving headfirst into the realm of a philosophy animated by confirmation bias. In essence, what Darwin says here is, "We all know the fossil record is incomplete. So, let's trust all the evidence that *does* support evolution and ignore all the evidence that *does not*." This is the blind faith of Darwinism, which is anathema to the truth.

William Fix, author of *The Bone Peddlers*, may have some unorthodox views on religion and spirituality, but his rational assessment of the fields of anthropology and paleontology are sound:

> [W]hile many anthropologists are willing to draw tremendous conclusion from the most uncertain materials, and are sometimes able to carry most of their colleagues along with them, the profession also displays a history of producing a few skeptics who may long be neglected and even derided, but who do establish that there *are* scientific objections to such claims. As it is, these skeptics are really the saviors of the profession. If it were not for them, we would be beleaguered with so many ancestors that man's evolutionary lineage would look like a New Years crowd at Times Square.[146]

He then writes:

> The "positive facts" [of the origin of man] are much rarer than most scientists admit, and half the time … those very facts embarrass evolutionary theory rather than support it.[147]

In his 2007 paper, Eugene Koonin of the National Center for Biotechnology Information at the National Institutes of Health wrote the following:

> Major transitions in biological evolution show the same pattern of sudden emergence of diverse forms at a new level of complexity.[148]

Koonin would continue to say that what falls outside of Darwin's theory is essentially everything:

> [T]he origin of complex RNA molecules and protein folds; major groups of viruses; archaea and bacteria, and principal lineages within each of these prokaryotic domains; eukaryotic subgroups; and animal phyla.[149]

Koonin concludes by saying that, when considering the fossil record as a whole, the principal "types" of life appear suddenly and fully equipped with all the biological features that distinguish them. Hence, there are no intermediate or transitional "types" that would suggest gradualism.

I will close this section with a quote from Dr. Niles Eldredge, a biologist and paleontologist. Dr. Eldredge actually co-developed the idea of punctuated equilibrium, which helps to explain all of the "stasis" that we see in the fossil record. The point is that Dr. Eldredge is a proponent of evolution, so we can appreciate the honesty of his statements. He writes:

> The smooth transition from one form of life to another which is implied in the [theory of evolution] is … not borne out by the facts. The search for "missing links" between various living creatures, like humans and apes, is probably fruitless … because they probably never existed as distinct transitional types … But no one has yet found any evidence of such transitional creatures. This oddity has been attributed to gaps in the fossil record which gradualists expected to fill when rods strata of the proper age had been found. In the last decade, however, geologists have found rock layers of all divisions of the last 500 million years and no transitional forms were contained in them. If it is not the fossil record which is incomplete then it must be the theory.[150]

As a whole, the fossil record is a hostile witness against macroevolution because of the utter lack of compelling evidence. In fact, what the fossil record does provide is compelling evidence against gradualism and Darwinian evolution by natural selection. Because of this overwhelming fossil evidence, it is clear that natural selection did not act in epochs past, and it did not act because it does not exist.

Putting It All Together

I have now explained seven distinct reasons that natural selection does not exist. First, looking at Darwin's formulations in *Origin of Species*, I discussed how natural selection was never properly explained in the first place, and never was an established scientific fact but a philosophical conjecture. Everything that was subsequently built on this porous foundation was therefore doomed to crumble and fall. Second, I explained all the spurious assumptions that Darwinian evolution by natural selection is predicated upon. Third, I explored how natural selection does not provide a sufficient explanation for life at the molecular level. Fourth, I explained why mutations are insufficient to explain the robust genetic variety that life demands. Fifth, I clarified that adaptive power is internal and an external "selection force" is superfluous. Sixth, I elucidated that natural selection does not explain the information necessary for life, and seventh, I exposed what the fossil record actually does—provide ample evidence against evolution by natural selection. In all of these reasons, what I accomplished was either to expose natural selection as totally lacking explanatory power or failing to actually elucidate what it claimed to do.

Considering all of these reasons as a whole, what I hope I have done is create a "logic of implausibility." That is, with the consideration of many different areas of scientific knowledge, the logical and reasonable conclusion is that natural selection is neither a plausible nor an adequate explanation for the diversity of life. Because evolution works by natural selection, and because natural selection is not plausible, the theory of evolution crumbles.

So, was Darwin wrong? Yes, he was. He was wrong from the very beginning, and evolution is not true because natural selection does not exist. What Darwin's *Origin of Species* really amounts to is an imaginative work of science fiction that has sadly cast a dark magic spell on many overzealous minds since the nineteenth century.

Science, Religion, and Science as a Religion

"Darwin was wrong." "Evolution is not true." "Natural selection does not exist." These are statements about presupposed scientific truth, but they are undoubtedly highly offensive. Why? Because many individuals have a deep-seated, almost religious conviction when it comes to the Godless worldview of scientism. Allow me to explain.

Science comes from the Latin word *scientia*, meaning "knowledge." Science is an opinionless, neutral realm that has no feelings. The *New Oxford American Dictionary* defines science as "the intellectual and practical activity encompassing the systematic study of the structure and behavior of the physical and natural world through observation and experiment." Scientists will, therefore, identify an idea yet to be tested because they have confidence that it may be true. Through empiricism, they test the idea and strive to prove it wrong in pursuit of a better explanation. Fear cripples science in that it preserves existing theories as opposed to trying to discredit them.

As with any other field in life, the research and experiments themselves tend to be objective, but science in practice and application can never be objective because it is executed by human beings, who are subjective. Pseudoscience calls itself scientific but only looks for evidence that confirms a theory and, when presented with contradictory

evidence, provides secondary theories and explanation to explain the discrepancies away. Pseudoscience does not make predictions because it has no real explanatory power.

Cognizant of how science has benefited humanity, we must recognize that science has its limitations. What's interesting is that human civilization has been around for thousands of years, yet the modern concept of science only came into being within the last few hundred years. The point is that human beings managed to excel tremendously despite lacking science—take, for example, the Egyptians, Persians, Greeks, and Romans. Science can tell you about the chemical bonds that are present in pigments on a canvas, but it cannot tell you if the painting is beautiful (aesthetics). If you want to know whether something is morally right or wrong (morality and ethics), then this is not a scientific question—gravity, for example, has no opinion on the matter. Science cannot confirm logical and mathematical proofs; it only presupposes them to operate. It can't prove metaphysical truths, such as the existence of other conscious minds. And here's the kicker: Science cannot prove itself. Why? Because you would have to use science to do it. True science recognizes its limitations and never tries to deify itself.

So, while science points us to what is true, it is not the exclusive way to the truth. It informs us about *parts* of reality but not *all* of reality. Why is that? Because there is a distinct difference between what something is and what something means.

So, all of that is science; then there is *scientism.* And what is scientism? It is science's diabolical second cousin. Scientism is a *worldview* that says, "Nature is all that there is," and, "Science is God." Scientism has many other names like scientific materialism, scientific naturalism, or scientific atheism. The point is that many who believe in Darwinism have taken a leap of faith and adopted the *worldview* of scientism and therefore reject any non-natural explanation of anything (this connection is seamless because if life can presumably be explained without God, then why bother with anything outside of the natural world?). In many cases then, what you end up with are individuals who are zealous disciples of *scientism* yet masquerade as mere devout proponents of *science*. The difference between the two is everything. Consider what the Distinguished Professor of Biology at U. Mass Lynn Margulis has said about Neo-Darwinists who take their scientific beliefs very, very seriously:

> A minor twentieth-century religious sect with the sprawling religious persuasion of Anglo-Saxon biology.[151]

The first problem with scientism is that it has nothing to do with science and jumps from the realm of truth-seeking to a philosophical assumption. That is, the presupposition, "All of reality can be explained naturally," is nothing more than that—a conjecture—which proves nothing but pretends to explain everything. This is why anything *super*natural *cannot* exist under scientism: according to the assumption, it isn't allowed to (science simply says miracles, for example, are a huge departure from the normal course of events and are thus highly *unlikely*). With this ideology, of course, there is no room for God, because He can't be reduced to atoms and the laws of physics! The second problem with scientism is that even a cursory analysis of reality reveals how it fails to explain some basic principles—examples include love, philosophy, law, ethics, and aesthetics. The third problem follows from the second problem in that scientism detaches you from the things that are most authentically human.

The fourth problem is that scientism makes of all reality meaningless. Allow me to explain. If we were to assume that scientism is true, then all of reality could be reduced to natural phenomena. Thus, a person who is a rigid advocate of scientism essentially boils down to being a bag of DNA whose thoughts, ideas, and worldview—at their root—equate to impersonal, unconscious forces resulting in the firing of neurons in their brain. This means that a person who is a rigid religious zealot is *also* a big bag of DNA whose thoughts, ideas and worldview can be reduced to impersonal, unconscious forces and neurons firing in their brain. Republicans, Democrats, feminists, chauvinists, atheists, pantheists, Jews, and Muslims are all, in their cores, the same thing. This tells us what? That everything is the same, nothing is true, and therefore nothing has any relevance or meaning. Subsequently, in a world where right and wrong have no meaning and everything is reduced to material odds and ends, nothing can be trusted. Therefore, when people say they believe in scientism, this statement means absolutely nothing, and thus they would, quite frankly, be better off remaining silent. And this is exactly what *science* does do when it comes to matters that fall outside of science—it is totally and completely silent.

> If science stands opposed to religion, it is not because of anything contained in either the premises or the conclusions of the great scientific theories. They do not mention a word about God. They do not treat of any faith beyond the one that they themselves demand.[152]

Ultimately, scientism artificially restricts science, yet the two are often mixed in contemporary society. A person who believes Darwinian evolution and then practices scientism changes hats and becomes a philosopher by extending the assertions of a scientific theory into social, religious, and political realms. In this regard, faith in evolution becomes zeal, science becomes religion, and the tyranny of pseudoscientific scientism runs rampant. We live in a reality where religious statements belong to the realm of faith and scientific statements belong to the realm of science—and what exactly *is* wrong with that? If it is not okay for a person of faith to bring a Bible into the science lab, they why is it okay for a scientist to bring her microscope into a church? Or the political arena? Or the social arena?

Scientism wants God dead. Science could care less. Scientism says *Origin* explains life by purely natural means. Darwin says God did it, at least in the beginning. Wait, what? Yes, Darwin himself was a creationist! Read Darwin's own words at the end of *Origin of Species*:

> There is grandeur in this view of life, with its several powers, *having been originally breathed by the Creator into a few forms or into one*; and that, whilst this planet had gone cycling on according to the fixed law of gravity, from so simple a beginning endless forms most beautiful and most wonderful have been, and are being evolved.[153] [Emphasis added.]

So, from Charles Darwin's own words, it is reasonable to conclude that he was a deist, someone who believes that God created the universe but then took a seat and let things be so that creation would continue being governed by natural laws. Additionally, when you read through all of Darwin's postulations in *Origin*, there is *nothing* inherently incompatible with a deistic Creator and evolution by natural selection. Why? Because

natural selection does not provide an explanation for the *genesis* of life, only the variety within it. And what's the point? That scientism would *never* allow God to create anything, but even in his own magnum opus, Darwin never thought life would be possible *without God*. This is the difference between a worldview that is a deviant from science and a scientific hypothesis.

In many ways, scientism resembles primitive religions. There is a big, unexplored territory (the supernatural) with an associated irrational fear of the unknown. When the unknown is not allowed to exist, creative exploration crumbles, and the full breadth of reality is artificially reduced. Because scientism says that the material world is all that there is and what science describes is all we need to know, there is a unified battle cry: "Everything that *I* know is all that is necessary to know." This is the height of vanity and self-centeredness. A humble mind is the key to science, as it engages in scientific inquiry recognizing that it understands far less than it understands. This is the perpetual, unexplored unknown that drives true scientists forward. Proud scientism criticizes, mocks, and ridicules all things not like itself and seeks to destroy them.

Conclusion

Evolution by natural selection is a wonderful work of the imagination that merely amounts to a nineteenth-century creation myth that tells the tale of a magical, invisible, and blind force that transformed goo into things you see at the zoo. It is an idea that only has credibility in the imagination, but nowhere else. It is an extraordinary claim that lacks extraordinary evidence. Modern science has validated this assertion and exposed just how *un*scientific Darwinism really is. Ultimately, then, because Darwinian evolution by natural selection is the best scientific explanation for the diversity of life on planet earth, science has no plausible explanation. This serves as an impetus for science to try harder, and the most reasonable thing that science can do in the interim is remain silent.

Indeed, if there was a scientific study that demonstrated positive evidence that natural selection created new kinds of animals or plants from simpler ancestors, I would be happy to take a look, but no such evidence exists. Even when you read books like Jonathan Weiner's *The Beak of the Finch*—which supposes to confirm Darwin's work and clarify that evolution is happening right now—when you actually look at the data for yourself, what you find is that "evolution" simply refers to the fact that the size of the finches' beaks on a particular island changes from season to season. So, finches remain finches.

So where do we go from here? Well, to Episode Six of *TruthFinder* the podcast. One of the basic foundations of human behavior is the ability to discern between right and wrong, between good and evil. Without this fundamental distinction, society would degenerate into chaos. So morally speaking, how do we know what is *really* right and what is *really* wrong? Is morality objective, or is it malleable? Are ethics transcendent, or are they the products of human culture? What does right and wrong tell us about God, if anything? Darwin provides no helpful answers because, as described, natural selection is only concerned with survival—it is *silent* when it comes to morality. As the philosopher Richard Rorty says:

> The idea that one species of organism is, unlike all the others, oriented not just toward its own increased prosperity but toward Truth, is as un-Darwinian as the idea that every human being has a built-in moral compass—a conscience that swings free of both social history and individual luck.[154]

Science will thus not be the final arbiter of moral truth because impersonal, indifferent forces cannot inform interpersonal morality. We'll have to look to logic, philosophy, and a healthy dose of common sense. Onward to *TruthFinder* Episode Six: What's Right About Right & Wrong?

Endnotes

[1] Over the past year, *TruthFinder* has tacked some other big issues like, "How do we know what is really true?" "Why is there something rather than nothing?" and "Why is there life instead of things?"

[2] "For Darwin Day, 6 Facts about the Evolution Debate," Pew Research Center, February 10, 2017, accessed September 13, 2017, http://www.pewresearch.org/fact-tank/2017/02/10/darwin-day/

[3] Ibid. Ninety-eight percent of scientists in the American Association for the Advancement of Science agree that living things have evolved over time.

[4] For example, as the famous evolutionary biologist Richard Dawkins writes in *The Greatest Show on Earth*, "Evolution is a fact. Beyond reasonable doubt, beyond serious doubt, beyond sane, informed, intelligent doubt, beyond doubt evolution is a fact."

[5] This means actually reading Darwin's *Origin of Species* and making an informed assessment based on the full breadth of the evidence.

[6] Phillip E. Johnson, *Defeating Darwinism* (Downers Grove, IL: InterVarsity Press, 1997), 57

[7] Charles Darwin's classic theory of evolution is referred to as *Darwinism*. Darwin did not know about genetics (this field of knowledge was still sixty years away), so this understanding played no role in the original theory. The modern theory of evolution does incorporate genetics into the classic theorem, and this new synthesis is called *Neo-Darwinism*. "Darwinism" in the twenty-first century really means "Neo-Darwinism," and so a formal distinction need not be made.

[8] "Definition of Evolutionary Terms," National Academy of Sciences, accessed December 13, 2017, http://www.nas.edu/evolution/Definitions.html

[9] Jerry A. Coyne, *Why Evolution Is True* (New York: Penguin, 2009), 3

[10] Coyne, *Evolution*, 3

[11] In the Appendix of his book, Dr. Coyne defines evolution as "genetic change in populations, often producing changes in observable traits of organisms over time."

[12] The precise scientific term for this phenomenon is gene migration (or gene flow), where there is a transfer of genetic information from one population to another.

[13] Or *Corvus brachyrhynchos*.

[14] Coyne, *Evolution*, 13

[15] Richard Dawkins, *The God Delusion* (New York: Houghton Mifflin Company, 2008), 13

[16] Coyne, *Evolution*, 249

[17] These beneficial alleles would give individuals subtle *adaptations* that subsequently give them an advantage over others.

[18] Coyne, *Evolution*, 11

[19] Coyne, *Evolution*, 13

[20] Notably, by definition, you *can* have small genetic changes in a population over time *without* natural selection, but these minute changes play *no role* in macroevolution. The clearest example of this would be nonselective mechanisms of evolutionary change, as already discussed.

[21] Gertrude Himmelfarb, *Darwin and the Darwinian Revolution* (Chicago: Elephant Paperbacks, 1996), 312

[22] Coyne, *Evolution*, 117-118

[23] Charles Darwin, *The Origin of Species: 150th Anniversary Edition* (New York: Signet Classics, 2003), 4

[24] Coyne, *Evolution*, 119

[25] Darwin, *Origin*, 502

[26] Darwin, *Origin*, 506

[27] Richard B. Goldschmidt, *Theoretical Genetics* (Berkeley, CA: University of California Press, 1958), 488

[28] J. M. Smith, "Life at the Edge of Chaos," *New York Review*, March 2, 1995, 28-30

[29] In fact, Francis Crick, who won the Nobel Prize for discovering DNA, calculated that the odds of a protein forming by chance is 1 in 10^{260}. Mathematically, 1 in 10^{50} is considered impossible. The point is to illustrate just one of the seemingly impassible gulfs when it comes to describing how the building blocks for life were originally established.

[30] In fact, these questions about the origin of life spawn a host of other questions, such as, If natural selection preserves those who survive, then why go to all the trouble of crafting complex organisms? If DNA codes for proteins that work inside cells, how did DNA "know" what to code for? Which came first—the DNA or the protein? *How*? How did proteins come to *interact* with other proteins to facilitate the processes of life? How did proteins *combine* to form living molecules, and how did *they* aggregate to work in a cell?

[31] J. A Campbell, "The Comic Frame and the Rhetoric of Science: Epistemology and Ethics in Darwin's Origin," *Rhetoric Society Quarterly* 24 (1994): 27-50

[32] K. Dose, "The Origin of Life: More Questions Than Answers," *Interdisciplinary Science Reviews* 13 (1988): 348

[33] Antonio Lazcano, "The Origins of Life," *Natural History* (February 2006)

[34] Darwin, *Origin*, 4

[35] Darwin, *Origin*, 61

[36] Darwin, *Origin*, 77

[37] Darwin, *Origin*, 97

[38] An idea discussed more fully by Anthony Flew, *Darwinian Evolution* (New Brunswick, NJ: Transaction Publishers, 1997)

[39] To be fair to Darwin, it must be said that while he believed natural selection was the most important vehicle for evolution, it was not the *exclusive* means. He thus allowed for change in organisms that did not involve natural selection.

[40] Darwin, *Origin*, 62

[41] Darwin, *Origin*, 77

[42] Darwin, *Origin*, 80

[43] And, even after the Earth's rotation was discovered, and it was clear that the Sun was *not* actually "setting," the use of the fitting metaphor remained because everyday at dusk, a person could see the Sun "set." A blind, purposeless process cannot ever select anything, and thus the term natural selection is less a metaphor and more of a misleading fabrication.

[44] Ernst Mayr, *What Evolution Is* (New York: Basic Books, 2001), 117

[45] Darwin, *Origin*, 61

[46] Darwin, *Origin*, 79

[47] Darwin, *Origin*, 103

[48] Furthermore, a monkey smashing on keys is *like* natural selection is that both seemingly have no intelligible intent. A monkey smashing on keys is *unlike* natural selection in that the former has eyes, is conscious, and executes purposeful activity.

[49] Darwin, *Origin*, 100

[50] Darwin, *Origin*, 86

[51] Himmelfarb, *Darwin*, 318

[52] Himmelfarb, *Darwin*, 319

[53] Himmelfarb, *Darwin*, 334

[54] Himmelfarb, *Darwin*, 335

[55] A. C. Grayling, "Psychology: How we form beliefs," *Nature* 474 (June 2011): 446-447

[56] "Sir Charles Lyell on Geological Climates and the Origin of Species," The Alfred Russell Wallace Page, last modified 1988, accessed October 18, 2017, http://people.wku.edu/charles.smith/wallace/S146.htm

[57] This stands in contrast to organisms that reproduce asexually, which pass on 100 percent of their DNA.

[58] Darwin, *Origin*, 125

[59] Darwin, *Origin*, 129

[60] Darwin, *Origin*, 157-159

[61] Darwin, *Origin*, 198

[62] Richard Dawkins, *The God Delusion* (New York: Houghton Mifflin Company, 2008), 147

[63] Roughly speaking, for modern humans, the mutation rate is about 1.2×10^{-8} per base pair per generation. See Aylwyn Scally and Richard Durbin, "Revising the human mutation rate: Implications for understanding human evolution," *Nature* 13 (October 2012): 745-53, https://pdfs.semanticscholar.org/7b4e/e80aec90b6e104453c4efcb566f803662fca.pdf

[64] Phillip E. Johnson, *Defeating Darwinism* (Downers Grove, IL: Intervarsity Press, 1997), 75

[65] David Hume, *An Enquiry Concerning Human Understanding / A Letter from a Gentleman to His Friend in Edinburgh*, ed. Eric Steinberg (Indianapolis: Hackett, 1977), 18

[66] And presumably, the individual would go on to reproduce and pass on this variation to offspring. Of course, this really is another ball to be struck, but for the sake of simplicity, I will omit this step.

[67] *Biochemical* refers those chemical processes and substances that occur within living things. For our discussion, we will largely focus on those biochemical phenomena inside the cell: proteins, the "machines" that make life work, and DNA, the code that makes life possible and that stores genes or genetic information.

[68] To give a specific example, consider that decades of research tell us there is *not* a linear relationship between a trait and a gene. What does that mean? That one gene does not exclusively code for one trait. The observable traits of an organism (and thus, adaptations) are the result of *interactions* between *many* genes, and individual genes have many effects on many traits. This is relevant simply because natural selection cannot simply account for the preservation of a gene—it must also account for the *interactions* that gene has with other genes to affect traits.

[69] M. W. Ho and Peter Saunders, "Beyond Neo-Darwinism—An Epigenetic Approach to Evolution," *Journal of Theoretical Biology* 78 no. 4 (June 1979): 589

[70] J. F. McDonald, "The Molecular Basis of Adaptation," *Annual Review of Ecology and Systematics* 14 (1983): 93

[71] J. A. Coyne and H. A. Orr, "The Genetics of Adaptation: A Reassessment," *American Naturalist* 140 no. 5 (November 1992): 726

[72] An example would be how gated transport between different compartments of a eukaryotic cell may have evolved. There are very few papers that merely speculate on how this may have happened without a specific detailed route of how said systems could have evolved. For example, see M. Maduke and D. Roise, "Import of a Mitochondrial Presequence into P. Dentrificans," *FEBS Letters* 337 no. 1 (January 1994): 9-13.

[73] Michael Behe, *Darwin's Black Box* (New York: Free Press, 2006), 15

[74] Behe, *Darwin's*, 5

[75] Behe, *Darwin's*, 18-21

[76] Behe, *Darwin's*, 22. Behe would continue to remark that (i) anatomy (i.e., gross adaptations) is not relevant to the question of whether evolution could take place on the molecular level and (ii) the fossil record can tell us absolutely *nothing* about whether interactions of 11-*cis*-retinal with rhodopsin, transducin, and phosphodiesterase could have developed step-by-step.

[77] Behe, *Darwin's*, 39

[78] Behe, *Darwin's*, 160

[79] Richard Dawkins, *River out of Eden* (New York: Basic Books, 1993), 83

[80] Note that irreducible complexity states that the *system* is irreducible, not the *parts*. So, explanations for physical precursors by themselves would be inadequate; there would have to be an explanation for said precursors in the context of the *system*.

[81] Behe, *Darwin's*, 46

[82] Behe, *Darwin's*, 151-152

[83] Behe, *Darwin's*, 155

[84] Behe, *Darwin's*, 159

[85] Darwin, *Origin*, 176

[86] Behe, *Darwin's*, 185-186

[87] Behe, *Darwin's*, 173

[88] James Shapiro, "In the details … What?" *National Review*, September 16, 1996, 62-65

[89] Motoo Kimura, *The Neutral Theory of Molecular Evolution* (London: Cambridge University Press, 1983)

[90] Darwin, *Origin*, 105

[91] "An Enquiry Concerning Human Understanding: On Probability," Bartleby.com, last accessed September 17, 2016, http://www.bartleby.com/37/3/8.html

[92] Richard Dawkins, *The God Delusion* (New York: Houghton Mifflin Company, 2008), 22

[93] Dawkins, *God*, 71

[94] "What is a gene mutation and how do mutations occur?" NIH US National Library of Medicine, last modified October 31, 2017, accessed November 1, 2017, https://ghr.nlm.nih.gov/primer/mutationsanddisorders/genemutation

[95] This of course assumes that the mutation does cause a change because the mutation may be silent.

[96] Most of our DNA is non-functional, so when we consider mutations as a whole, most are neutral meaning they are neither harmful nor beneficial. Of those mutations that actually do have meaningful effects, they are almost always deleterious. See MW

Nachman and SL Crowell, "Estimation of the Mutation Rate per Nucleotide in Humans," *Genetics 156* no. 1 (September 2000): 297-304

[97] Monica Hollstein et al., "Mutations in Human Cancers," *Science* 253, no. 5015 (July 5, 1991): 49-53

[98] Rishabh Sehgal et al., "Lynch Syndrome: An Updated Review," *Genes* 5 no. 3 (June 2014) 497-507

[99] Himmelfarb, *Darwin*, 329

[100] Julian Huxley, et al., eds., *Evolution as a Process* (London: MacMillan,1954), 5

[101] See Stephen C. Meyer, "The Origin of Biological Information and the Higher Taxonomic Categories," *Proceedings of the Biological Society of Washington* 117, no. 2, (2004): 213-239

[102] Meyer defined form as "the four-dimensional topological relations of anatomical parts. This means that one can understand form as a unified arrangement of body parts or material components in a distinct shape or pattern (topology)--one that exists in three spatial dimensions and which arises in time during ontogeny."

[103] For example, see J. F. Reidharr-Olson and R. T. Sauer, "Functionally acceptable substitutions in two alpha-helical regions of lambda repressor," *Proteins* 7, no. 4 (1990): 306-16

[104] M. F. Perutz and H. Lehmann, "Molecular pathology of human hemoglobin," *Nature*, 219 (1968): 902-909

[105] M. Behe, "Experimental support for regarding functional classes of proteins to be highly isolated from each other," in J. Buell and V. Hearn, eds., *Darwinism: Science or Philosophy?* (Richardson, Texas: Foundation for Thought and Ethics, 1994), 60-71

[106] D. D. Axe, "Extreme functional sensitivity to conservative amino acid changes on enzyme exteriors," *Journal of Molecular Biology* 301, no. 3 (2000): 585-596.

[107] Ibid.

[108] William A. Demski, "The logical underpinnings of intelligent design," in W. A. Dembski and M. Ruse, eds., *Debating Design: From Darwin to DNA* (Cambridge: Cambridge University Press, 2004), 311-330

[109] In other words, mutations happen in the *medium* of DNA, but the brutal fact of mutations do not account for the *message* that DNA contains.

[110] See Randy Guliuzza, "Darwin's Sacred Imposter: The Illusion That Natural Selection Operates on Organisms," *Acts & Facts* 40, no. 9 (2011): 12-15

[111] Michael J. Behe, *The Edge of Evolution: The Search for the Limits of Darwinism* (New York: Free Press, 2007), 29

[112] And because the environment is often defined by scarcity of resources (like food and rain) in many other scenarios *it* is not a conscious agent that "selects" but is an unconscious detriment to life that must be overcome by purposeful organisms.

[113] Furthermore, if we subject this analysis to David's Hume skepticism about causality, we see plainly and clearly that definitive, causal events are certainly well within the limits of sense experience—that is, the ability to directly observe the protein coded by anti-X neutralizing Virus X and thus rendering it non-lethal. Causal forces are therefore known with "exactness."

[114] Organisms *already have* the ability to reproduce, and they already possess variable traits that are heritable.

[115] For example, consider the often-ignored 2001 research study by evolutionary biologist Joel Kingsolver that found essentially no correlation between specific biological traits and either reproductive success or survival. J.G. Kingsolver et al., "The Strength of Phenotypic Selection in Natural Populations," *The American Naturalist* 157 no. 3 (March 2001): 245-61

[116] There is therefore a *distinction* between an organism and its environment that not does imply a rigid *seperation*.

[117] Catherine R. Linnen et al., "On the Origin and Spread of an Adaptive Allele in Deer Mice," *Science* 325 (August 2009): 1095-98

[118] J. Davies, "Origins and Evolution of Antibiotic Resistance," *Microbiologia* 12, no. 1 (March 1996): 9-16.

[119] And what these resistance genes code for is highly specified—for example, increasing security at a cell's wall so antibiotics can't get in and are forced away, escorting medication out of a cell, or making enzymes that eradicate the antibiotics themselves.

[120] George C. Williams, "A Package of Information," in *The Third Culture: Beyond the Scientific Revolution* (New York: Simon and Schuster, 1995), 42-43

[121] And for those who entertain the idea that information can just happen, like an experimenter with the intent of producing Shakespeare by putting a monkey in front of a keyboard and letting it smash on letters, know that *repetitive* order or *random* order has very little information content. When it comes to explaining life, the information content is astronomical.

[122] And in turn, enzymes require genes to be coded. This begs the question for natural selection: If genes require enzymes to work, which came first—the gene or the enzyme—and how? What is the point of a gene that cannot be decoded to form an enzyme, and what is the point of an enzyme that has no gene to work on?

[123] Transcription refers to making an RNA copy of a gene, and translation translates the message on RNA into a protein. In other words, the information in DNA codes for information in RNA and *that* secondary information is what provides the instructions on how to make a protein. The point is to illustrate that as the complexity of information increases, it becomes less and less likely that a blind, non-directed process mediated it.

[124] David Berlinksi, "On the Origins of Life," *Commentary* 25 (February 2006): 30-31

[125] This is getting into the realm of paleontology, or the scientific study of past life. A brief definition of the fossil record is the total collection of fossils from organisms that

lived a long, long time ago preserved in fossils in the Earth. Body fossils typically preserve an animal's bones and shell.

[126] And as was mentioned previously, *natural* selection also *cannot* be tested by manmade experiments because, invariably, those experiments are *designed*. These are not examples of natural selection—they are all examples of *artificial* selection.

[127] And for those particular about language, the *historical* record tends to refer to written information while fossils are by definition *prehistoric*. I say the fossil record is historical in the sense that it contains records of past events in a past time.

[128] Coyne, *Evolution*, 178

[129] And yes of course there are instances where over time, particular fossils demonstrate some degree of incremental change, but fossils demonstrating incremental change *merely demonstrates incremental change*, not evolution by natural selection. In those rare cases when scientists look back and speculate that a fossil may be transitional, these rare specimens represent anomalies and do not represent the full canon of fossil evidence.

[130] Johnson, *Darwin*, 60

[131] Niles Eldredge, *Rethinking Darwin* (New York: Wiley & Sons, 1995), 95

[132] This, of course, comes with the recognition that if Darwin's theory is true, natural selection actively works to exterminate parental forms and intermediates. Thus, evidence of their existence could *only* be found in fossil remains.

[133] Darwin, *Origin*, 341

[134] One possible explanation that modern science does provide is the idea that (generally speaking) over the first 80 percent of the history of life, all species were soft-bodied, and therefore did not leave fossil remains of bony structures. This explanation *assumes* that Darwinism is true and then looking back, *explains away* a deficiency of the fossil record. It does not begin with the evidence and then draw objective conclusions.

[135] Darwin, *Origin*, 161

[136] M. Bowden, *The Rise of the Evolution Fraud* (San Diego, CA: Creation-Life Publishers, 1982), 47-48

[137] Darwin, *Origin*, 327

[138] William R. Fix, *The Bone Peddlers* (New York: Macmillan, 1984), 169

[139] Coyne, *Evolution*, 22

[140] Coyne, *Evolution*, 198

[141] Darwin, *Origin*, 331

[142] Darwin, *Origin*, 314

[143] Darwin, *Origin*, 335

[144] Darwin, *Origin*, 329

[145] Darwin, *Origin*, 336

[146] Fix, *Bone Peddlers*, 27

[147] Fix, *Bone Peddlers*, 153

[148] Eugene Koonin, "The Biological Big Bang Model for the Major Transitions in Evolution," *Biology Direct* 2 (August 2007): 21

[149] Ibid.

[150] Dr. Niles Eldredge, *The Guardian*, November 21, 1978

[151] C. Mann, "Lynn Margulis: Science's Unruly Earth Mother," *Science*, April 12, 1991 (*252*), 378-381

[152] David Berlinski, *The Devil's Delusion* (New York: Basic Books, 2009), *xiv*

[153] Darwin, *Origin*, 507

[154] Richard Rorty, "Untruth and Consequences," *The New Republic*, July 31, 1995, 32-36