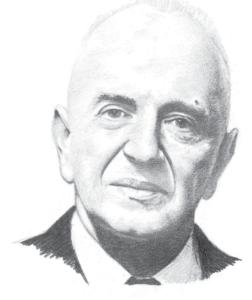
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Dobzhansky: 40 Years Later Nothing Makes Sense

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Abstract

Forty years ago Theodosius Dobzhansky, a scientist credited with developing the reigning paradigm of neo-Darwinism, published his iconic article with the famed title, "Nothing in Biology Makes Sense Except in the Light of Evolution." The intervening decades have seen his three predictions falsified; namely those regarding genetics and the tree of life, the role evolution theory would play in the progress of biological science, and one particular Arab sheik whom Dobzhansky identified by name. Dobzhanky's claims are evaluated in the light of four decades of hindsight, much additional scientific research, and the continued development of the creation model. His arguments regarding the diversity of life, biological universals, and abiogenesis are answered in a point-by-point presentation.

Introduction

In what has become one of the most famous evolution papers ever published, Theodosius Dobzhansky (1973) boldly declared that Nothing in Biology Makes Sense Except in the Light of Evolution. In this article, he makes several predictions about how evolution has and will continue to illuminate biological research, and that future research will even further illustrate the scientific brilliance of Darwinian evolution. However, have the claims of Dobzhansky stood the test of time?

Now celebrating the 40th anniversary (March 1973) since its original publication in *The American Biology Teacher*, subsequent research has challenged many of Dobzhansky's claims, and has clearly falsified his three predictions: (a) that genetics would confirm Darwin's hierarchical tree of life, (b) that life sciences discoveries would center on evolution-based work, and, of all things, (c) that one Arab Sheik would always believe that the sun orbited the earth.

Dobzhansky's lengthy introduction deals with neither evolution nor biology. Instead, he makes a guilt-by-association charge against creationists by using the laws of planetary motion to make an invalid appeal to authority. "To nonspecialists most of these facts are unfamiliar," he writes and, therefore, concludes that people should trust objective scientists, "those who took the time to study the evidence" (Dobzhansky, 1973, p. 125). Dobzhansky's logical fallacy is the assumption that because the methods of applied science, which have broad agreement on all sides, enabled mankind to reach the moon, evolutionists

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therefore can be trusted in a different field, namely, theoretical ideas on biological origins.

Applied science, however, survives enormous changes in secular theories about the beginning of the universe and of life. Thus, such scientific accomplishment does not depend upon those changing theories of origins.

Darwin's book has an overreaching title, On the Origin of Species, for his theory begins with species already in existence. Likewise, the standard models for the evolution of stars typically begin with the explosion of preexisting stars or, at the least, with stars already forming (Bernitt, 2002; Protostar, 2005) and with the chicken-or-egg uncertainty of which came first, the galaxies or the stars (e.g., Maddox, 1998, pp. 48-49). This illustrates that the public's high-level of confidence in secular origins stories is not justified. With the fundamental nature of matter, life, physical laws, and space itself still such a deep mystery, then surely the matter of origins is even more obscure to secular science. Dobzhansky thus begins with the logical fallacy of an unjustified appeal to authority.

His first prediction regarded Saudi Arabia's late Sheik Abd el Aziz bin Baz, who had recently insisted that the sun orbited the earth. Dobzhansky declared that it would be useless to present evidence to those who "fear enlightenment," asserting that the Sheik was "so hopelessly biased that no amount of evidence would impress him" (Dobzhansky, 1973, p. 125). However, in 1985 the U.S. invited Prince Sultan bin Salman to fly aboard the space shuttle Discovery. Later, hearing a firsthand account of the evidence from a source that he trusted, bin Baz changed his mind, falsifying Dobzhansky's prediction (Bin Baz, 2005).

Dobzhansky judged correctly that the sheik had been "ignorant of the evidence," but science literacy is not a good predictor of the public's acceptance of politically correct views, such as human-caused global warming or humans evolving from ancestral primates. A National Science Foundation study reported in the journal *Nature Climate Change*, concluded: "As respondents' science literacy scores increased, their concern with climate change decreased" (Kahan et al., 2012 p. 732). The NSF may not want to fund similar research related to Darwinism because of findings in recent studies by evolutionists at leading institutions.

First, 60% of U.S. public school biology teachers would rather not teach evolution (Berkman and Plutzer, 2011). Second, most U.S. medical doctors believe that God was involved in the origin of humans, and 60% reject a strictly secular Darwinism (Poll, 2005; Witt, 2005). And in 22 years of hosting a daily talk radio program, not one of the many evolutionist callers who brought up carbon dating knew that 14C, with its half-life of 5,730 years, is useful to date objects only thousands of years old, not millions, as commonly assumed.

After using the sheik example to imply that all creationists are guilty of ignorance of the evidence, Dobzhansky's next criticism is arbitrary because he directs it only at creationists. Given the widely recognized resistance of scientists to discard disproved paradigms, he could have been describing secular scientists when he wrote, "some people fear enlightenment, because enlightenment threatens their vested interests" (Dobzhansky, 1973, p. 125). As thoroughly documented, the scientists willing to risk their "vested interests" are those who have hurt their careers by publicly airing their scientific challenges to Darwinism (Bergman, 2008).

Unwittingly presenting contradictory conclusions in defense of an old universe, Dobzhansky urges the public to place unjustified confidence in the claims that the universe "may have existed... eternally," or contrariwise, that it only existed for a comparatively brief moment of "10 billion years" (Dobzhansky, 1973, p. 125). That extreme flexibility in dating demonstrates secular-minded comfort with near infinite elasticity in interpreting data. That range, from 10^9 to 10^∞ , acceptable to many old-earthers including Dobzhansky, dwarfs the comparatively modest disagreement between big bang advocates and biblical creationists, of between 10^4 and 10^9 years. Yet Dobzhansky exuded confidence in fields of science outside of his own area, such as geology and astronomy, even though the age range estimates he provides indicate the tenuous nature of his claims.

Forty years later, cosmologists are so eager to defend their claim of materialistic origins that many posit far more than 10⁵⁰⁰ entire parallel universes (Linde and Vanchurin, 2009; Gefter, 2009) and hope that explains why our universe, so well designed for life, happens to exist. Dobzhansky failed to see that pursuing strictly naturalistic assumptions would lead anti-creationists to make increasingly over-the-top, wildly elastic interpretations from the data to explain the exceedingly unlikely physics necessary for our biological existence, let alone our sentience.

If today's cosmologists would factor in the unlikely appearance of biomolecules (e.g., proteins, lipids, DNA) and their initial reproducibility, all from nondirected and pre-natural-selection chemical processes required to occur during the same time period and in the same micro-location, then their vanishingly insignificant number of 10⁵⁰⁰ universes still could not explain our existence. Septillions upon septillions of universes are merely spoken into existence by the very persons who deny that God has the ability to speak into existence one universe.

Evolutionists have been influenced by Darwin, Dobzhansky, and Dawkins (Dawkins, 2009) to offer assertions and analogies as though they carried the force of evidence. "Contrary to Bishop Ussher's calculations, the world did not appear in approximately its present state in 4004 BC" (Dobzhansky, 1973, p. 125). Yet short-lived Carbon 14 is everywhere it is not supposed to be (Baumgardner, 2005), including in the interior of diamonds (Sarfati, 2006).

Dobzhansky (1973, p. 125) also claimed that "the origin of life on earth is dated tentatively between 3 and 5 billion years ago." That wide range should lead evolutionists to wonder whether this conclusion is from a scientific or a philosophical dating method. A star like our sun has about ten billion years' worth of (extraordinarily efficient nuclear) fuel. Over the decades since Dobzhansky, astronomers have danced awkwardly, trying not to step on evolutionist toes. Consuming fuel over four billion years changes the nature of the sun's core. Dobzhansky ignores this faint young-sun problem first publicized by Carl Sagan in 1972. Physics calculations show that the sun would have been 30% cooler that long ago, insufficiently warm to allow for liquid oceans, contradicting the stories of evolutionary geology, paleontology, and the origin and spread of life. Geologists, paleontologists, and oceanographers report no evidence of iced-over oceans on a frozen earth (e.g., Faulkner et al, 2009; Oard, 2011).

Ice reflects far more of the sun's rays back out into space than rock, vegetation, soil, and water, all of which readily absorb sunlight. If the earth had an ice cover, it would deflect the heat required to thaw and would still be frozen. The physics for the faint young sun are not controversial (Faulkner et al., 2009), but the stress it puts on evolution is. The technique evolutionists widely use for dealing with the problem is to propose fine-tuning secondary assumptions, beginning with ammonia in the oceans (Sagan and Mullen, 1972), to greenhouse gases, to lost solar mass, or a just-so changing relationship of energy output, solar wind, atmospheric conditions, and cosmic rays (Faint Young Sun Paradox, 2005).

Dobzhansky (1973, p. 125) put much faith in "the estimates of... the duration of ... paleontologic eras, and of the antiquity of man's ancestors" which he said, "are now based mainly on radiometric evidence." That evidence and interpretation is based on selective data and even in 1973 showed great inconsistencies. During the decades since, creationists have widely publicized these anomalies, which are everywhere. New rock can date a million years old, and the same rock flow in the Grand Canvon's inner gorge gives contradictory dates 1.5 billion years apart (Snelling, 2004). Rock atop the Grand Canyon dates older than rock in the bottom strata. Experiments demonstrate that radioisotope half-lives are inconstant (Brown, 2010; Woodmorappe, 1999), and laboratories measure significant levels of ¹⁴C in diamonds, natural gas, marble, coal, dinosaur fossils, etc. (Baumgardner, 2005; Enyart, 2012).

Dobzhansky failed to credit Christian creationists, like Copernicus, Kepler, and Newton, who ended the sciencestalling reign of geocentrism that the world received from pagan theorists like Plato (Spindle of Necessity, 2004) and Ptolemy. Unlike the old-earth geologists Dobzhansky trusted who make excuses for the ubiquitous "anomalies" in their data (like 14C everywhere it should not be), Kepler refused to ignore the anomalies in planetary orbits because he was willing to put the actual data above the reigning paradigm. As a result, he discovered the laws of planetary motion and freed our intellects from superficial but entrenched interpretations of nature. And like Newton, Galileo's revolution was not against the Bible but, as in his Dialogue Concerning the Two Chief World Systems, against the geocentric views of a character he called Simpleton (i.e., defenders of Aristotle). So, while failing to credit leading creationists for defeating geocentrism, Dobzhansky (1973, p. 126) referred to a lesser author's discredited book Omphalos as "early antievolutionist" because two years before Darwin's Origin of Species it claimed the fossil record was created

to give an appearance of age (Gosse, 1857, pp. 369–370). Thus, the article's introduction ends with another attempt to convict modern creationists through guilt by association.

The introduction of Dobzhansky's revered article, therefore, is wrong on its first prediction and uses the logical fallacies of guilt by association, arbitrary accusation, and unjustified appeal to authority.

Diversity of Living Beings

Dobzhansky then presented his argument for evolutionary biology with claims that are now easily seen as unscientific, arbitrary, and circular. Dobzhansky (1973, p. 126) writes, "The diversity and the unity of life are equally striking." He fails to acknowledge that evolution predicts neither biological unity nor diversity. As described twenty years ago by information specialist Walter ReMine (1993, p. 350), evolution theory merely accommodates such observations after the fact, "like a fog adapts to a landscape."

Then, just like a creationist, Dobzhansky describes with awe the range of life from microorganisms to whales. Because he is claiming to present evidence against the belief that a brilliant Creator designed the great diversity of life, it is therefore arbitrary for him to imply that the wonder of life is evidence against creation and for evolution.

Creationists have long documented that evolutionists frequently argue in circles. For example, when trying to account for the unexpected complexity of life, they typically invoke far greater complexity. To account for a single living cell, some appeal even to space travel and alien civilizations (Crick and Orgel, 1973). To explain astounding cellular biology, countless evolutionists from DNA co-discoverer Francis Crick to pop-science author Richard Dawkins have speculated that a long time ago "somewhere in the universe," aliens may have "designed a form of life that they seeded onto perhaps this planet" (Bob Enyart Live, 2008). Then, hoping to explain the unexpected complexity and perfectionist fine-tuning of the universe, secularists appeal to multi-trillions of parallel universes (Multiverse, 2002). They ignore that they are invoking even greater unobserved complexity to explain what we do observe. They also seem unaware that they are not answering the origin-of-life question when they propose that life is too complex to have originated here on the hospitable earth, so it must have begun elsewhere.

Forty years ago the infant field of molecular biology gave glimpses of the bewildering complexity of living cells. In that context we come to the "highly significant" evidence offered for the claim in Dobzhansky's title. He argued that, because of the uncertainty of how to characterize viruses, which are on "the borderline between living and inanimate matter," they therefore are evidently at the simple end of the "simplicity-complexity spectrum" (Dobzhansky, 1973, p. 126). This non sequitur is also somewhat circular. Dobzhansky admits that a virus must "subvert the biochemical machinery of the host cells" (Dobzhansky, 1973, p. 126). Therefore, the viral world requires greater complexity (including the host cell), not less, than the world of singlecelled organisms. The ensuing four decades of research have increasingly shown the complex sophistication both in the cell and the virus itself (Sarfati, 2008). Dobzhansky's commitment to evolution has clouded his ability to see that the greater complexity of the virus/ cell system logically does not "obliterate" the physical hurdles to abiogenesis. Furthermore, because a virus cannot reproduce on its own, by definition it cannot originate on its own by Darwinian mechanisms (Bergman, 2000).

If life could arise only if the right chemicals could amass together, then the earth should be popping with new life-forms. At every moment of every day, millions of carcasses and quintillions of cells are in every possible stage of decomposition, bringing together all of the right chemicals. Yet no new life appears. Decades of investigation into abiogenesis research has not generated excitement for Dobzhansky's carefully unstated implication, that by a materialistic process molecules somehow can bridge the gap from the inanimate to the animate. Even the recent synthesis of building-block ribonucleotides (Powner et al., 2009) required many steps in an intelligently designed laboratory experiment, which, regardless, did not even approach the question of the source of biotic information that such nucleotides must possess to support life. Far from evolutionists having shown forty years ago that such a gap is bridgeable, the abiogenesis field is now stagnant, lacking funding, new ideas, and anything close to a consensus. Instead, the mounting scientific knowledge has greatly increased the known abiogenesis hurdles, which is why evolutionists appeal to aliens and, increasingly, to an almost inexhaustible number of universes.

Dobzhansky (1973, p. 126) wrote, "the human brain has some 12 billion neurons; the synapses between the neurons are perhaps a thousand times as numerous." Neurologists today estimate we have closer to 100 billion neurons with 100 trillion synapses. He also estimated that, "between 1.5 and 2 million species of animals and plants have been described," guesstimating the actual number at perhaps twice that (Dobzhansky, 1973, p. 126). Although rainforest research has produced downward estimates of insect diversity (Novotny et al., 2002), across all domains of life, scientists identify about 18,000 existing species annually, increasing the total number known to about 1.9 million and leaving perhaps two to ten times (or more) of that number of species undiscovered (Chapman, 2009).

Dobzhansky (1973, p. 126) asks what can explain this "colossal diversity" and

the many "biological curiosities." He describes their existence with the nonscientific terms "whimsical," "superfluous," and "jocular," implying that such characterizations are, first, accurate and, second, that they scientifically favor evolution over creation. But how does science determine if something is whimsical? Dobzhansky presents no scientific or theological reasons why a brilliant Creator should not be expected to fill the world with millions of curiously diverse creatures. So he presents another non sequitur: "The only explanation that makes sense is that the organic diversity has evolved in response to the diversity of environment" (Dobzhansky, 1973, p. 126). This is philosophy, not science. Claiming that such diversity favors evolution over creation would be relevant only if creation science required that God could not enable a fine-tuning of life to fill very diverse environments. Robustness in both economics and ecology increases as systems incorporate greater variety. Dobzhansky never deals with the obvious "diversity-is-our-strength" rebuttal to his claim.

Creationists frequently notice Darwinists amassing evidence that precisely fits the biblical model but then arbitrarily claiming it as evidence for evolution, a curiosity Darwinism does explain. In a fallen world, those who discount the Creator's actions are most fit to survive in godless institutions (Bergman, 2008). So Dobzhansky (1973, p. 126) interprets all life as selection from nondirected change: "the environment presents challenges to living species, to which the latter may respond by adaptive genetic changes." But creationists quickly point out the limits to biological adaptationthat organisms could not survive while evolving vital organs; and that, heading back down the fitness terrain, you would get non-functional legs long before you get functional wings.

Dobzhansky (1973, p. 127 & 129) continues to speak of "extravagant surfeit" and of "caprice" and uses another

unscientific term, "overspecialized," even for species that survive very well. Also, he lost track of which worldview he was opposing.

> The evidence of fossils shows clearly that the eventual end of most evolutionary lines is extinction. ... All this is understandable in the light of evolution theory; but [he claims] what a *senseless* operation it would have been, on God's part (Dobzhansky, 1973, p. 126).

His argument, though, was already fully rebutted 3,500 years ago in Genesis chapters 3, 6, and 9, and 2,000 years ago by Jesus Christ in the New Testament, and elsewhere in Scripture. Dobzhansky seems unaware that creationists squarely respond to the artifact of the geologic record as the result of the global Flood. This is ironic because while Dobzhansky claimed to be a Christian, he took it upon himself to publish against the young-earth movement; yet he was writing more than a decade after Whitcomb and Morris wrote *The Genesis Flood*.

The biblical creationists he intended to mock by referencing Bishop Ussher's "4004 BC" date for Genesis 1 maintain that the Earth suffered a global Flood by God's judgment, which directly explains an extinction event that scientists have now independently identified. Called "the largest mass extinction in Earth history, with the demise of an estimated 90% of all marine species" (Brennecka et al., 2011, pp. 17631; see also Stanley, 2007), its witness on land includes the mass burial of dinosaurs with clams, seashells atop the world's major mountain ranges, and billions of dead things buried in rock layers laid down by water all over the earth (Ham, 1987).

Dobzhansky uses a fungus, a beetle, and flies to make one of his main arguments, that they are "overspecialized." He applies this nonscientific term to species that he would presume have survived thousands of times longer than did the Roman Empire. By what scientific criteria can he criticize them as overspecialized? He then builds on his philosophical claim with a raw assertion that "only a creative and blind process could produce, on the one hand, the tremendous biologic success that is the human species and, on the other, forms of adaptedness as narrow and as constraining as those of the overspecialized fungus, beetle, and flies" (Dobzhansky, 1973, p 127). Only a blind process could do all that? Certainly, an intelligent Creator could.

"Perhaps the narrowest ecologic niche of all is that of a species of the fungus family Laboulbeniaceae, which grows exclusively on the rear portion of the elytra [hardened forewing] of the beetle Aphenops cronei, which is found only in some limestone caves in southern France" (Dobzhansky, 1973, p. 126). Fact checking Dobzhansky's specific claim is difficult because that particular species of beetle is not listed in the Encyclopedia of Life, or in Biodiversity Heritage Library, or in wikispecies.com, or (according to a Google search) anywhere on the Web. The genera Aphaenops exists (also spelled Aphoenops), but a cronei species is not to be found. As an aside, marine animals Croneisella, Croneisigenys, Croneisites, and Cronia do appear (Sepkoski, 2002, p. 404; Global Names Index, 2012). Moreover, Dobzhansky did not identify which of the widely distributed Laboulbeniaceae fungi species he was referencing. Species "inflation," which required leading scientists to reduce a list of over 1,000 named dinosaurs to about 500 (Benton, 2008; Amos, 2008), is a known problem of fungi in the south of France, including those parasitic to beetles in caves in the Pyrenees (Santamaria and Faille, 2007). Regardless of whether Dobzhansky's fungus is more prevalent than he assumed, he did not even attempt to show how a narrow niche would be scientific evidence favoring evolution over creation.

Then, describing a fly that lives in oil in California, Dobzhansky omitted the

interesting detail that the fly eats insects that get trapped in the oil. Such flies perform yet another ecosystem cleanup mission, as is true of a million species filling countless niches from vultures and sea cucumbers to insects and microbes. Scavenger crews clean up environments worldwide. But Dobzhansky does not explain why the fittest organisms surviving would naturally evolve to become part of a complex, self-cleaning ecosystem. Darwinism allegedly explains aggression, as claims Richard Dawkins in The Selfish Gene, and altruism, as claims Edward Wilson in Sociobiology, yet the extremely indirect benefits to one species from a cleaner environment for all species surely would be as difficult for natural selection to sense as it would be for a princess to feel a pea under her mattress. Regarding "natural selection," Dobzhansky (1973, p. 127) admits that, "species are produced not because they are needed for some purpose," beyond themselves.

Likewise "larvae of the fly Drosophila carciniphila develop only in the nephric grooves beneath the flaps of the third maxilliped [claws] of the land crab Geocarcinus ruricola, which is restricted to certain islands in the Caribbean" (Dobzhasky, 1973, p. 127). If niche living, however, resulted from natural selection operating on random mutations, evolutionists would be surprised to find out that different phyletic lines of flies allegedly independently evolved to live in similar ways on crabs. Reports from 1974 and again in 2008 indicate that Dobzhansky's fly is only "one out of three known fruit flies that have found a home on (and inside of) land-crabs" (Stensmyr et al., 2008, p. 1; see also Science Daily, 2008), and of the thousands of fruit fly species (most of which actually feed on microbes), another living on a crab also shares a similar geographic home on Grand Cayman Island in the Caribbean.

Evolutionists claim "it is intriguing that two species in the same lineage

evolved the same odd choice of breeding substrate" (*Science Daily*, 2008). A colleague of Dobzhansky's, reported,

> Three species of Drosophila have accomplished an innovation in that they breed ... on tropical land crabs. This could be dismissed as curious aberration were it not for the fact that the three flies concerned represent three different phyletic lines of the family (Carson, 1974, p. 3517).

Finding multiple flies that allegedly evolved similar behavior cannot be both clear evidence and an intriguing aberration. The Carson paper would have correctly concluded if the word "adapt" had been used instead of "evolve," for it proposed that "genetic systems of many conservative groups of organisms carry variability that would permit them to evolve [adapt] in a novel direction" (Carson, 1974, p. 3517). God designed, in organisms, the ability to adapt, and that is why so many can do so rapidly. Dobzhansky misses the point when he claims, "there is, of course, nothing conscious or intentional in the action of natural selection" (Dobzhansky, 1973, p. 127). He incorrectly credits the environment, via natural selection, for the adaptive ability of the organism itself (Guliuzza, 2011). Just as a civil engineer can identify a planned community as compared to the early metropolitan areas that grew more haphazardly, so too the consistency of organisms filling ecological niches and widespread symbiotic relationships point to the omni-competent design of the genetic and epigenetic information that permit adaptation into novel directions. Dobzhansky's faith in the creative power of natural selection is no longer shared even by all leading evolutionists (ReMine, 2012b).

Dobzhansky (1973, p. 127) then makes the common straw man attack, alleging antievolutionists, "fancy that all existing species were generated by supernatural fiat ... pretty much as we find them today." However, even Dr. Eugenie Scott's virulently anti-creationist

National Center for Science Education acknowledges that "many creationist thinkers of the classical period through to the 19th century thought that species could change" (Wilkins, 2006, p. 36). And further, "what is more, nothing in the biblical or theological traditions requires that species are fixed, only that kinds exist, which neither evolutionists nor traditional creationists ever denied" (Wilkins, 2006, p. 36). Dr. Henry Morris, perhaps the world's most famous youngearth creationist, had written more than a quarter of a century earlier, "the Bible does not teach the fixity of species" (Morris, 1946, p. 48). Oxford fellow and author of Plato, David Ritchie wrote, "the biological doctrine of the fixity of species, in the stiff dogmatic form which modern evolutionary theories have overthrown, is, in fact, the direct historical descendant of Plato's theory" (Ritchie, 1902, p. 91). While Plato cannot escape blame for geocentrism, Ritchie did not hold him responsible for the later fixity dogmatism, yet by way of "forms" and "essentials" even his protégé Aristotle was used to advocate for fixity (Garner, 2009). Darwin's own mentor, Charles Lyell, was a fixity proponent, as were many professional scientists of that day (Sapp, 2003, pp. 20, 30).

Following Dobzhansky, evolutionists today exploit the history of fixity to smear modern creationists, a confusion that results in part from language translations and the change in the meaning of terms through history. The Bible speaks of created "kinds" from the Hebrew word min, long translated into Latin by the word species, genera, and genus, the latter also being a Greek term. From Jerome in about AD 400, to Calvin in the 1500s, and for centuries afterward, Christians have used these terms for the Bible's "created kinds" (Hodge, 2009). The father of modern biology, creationist John Ray, was the first to define species specifically for biology. Later, the father of biological classification, creationist Carl Linnaeus, brought species and the

term *genera* (*genus*) into widespread use for systematic taxonomy.

However, the meaning of *species* has changed over time to where it no longer identifies created kinds but subgroups. Both Ray and Linnaeus later in their careers recognized change within species (Bell, 2003); and in his 12th edition of Systema Naturae Linnaeus indicated that genus, as opposed to species, would be closer to the created kind (Wood and Garner, 2009). But whereas the entire creation movement and leading creationists for decades, and even centuries, including Morris, G. W. Carver, and Francis Bacon (Kelsey, 2009, p. 163), would agree that, for example, plants and dogs change, they all deny that regardless of the time allotted, a plant could change into an animal or that the created dog kind could change into cat or the turtle into alligator.

Dobzhansky rejected the existence of a personal God and life after death (Avala and Fitch, 1997). Yet he engaged in a theological questioning of a creator by asking, "What is the sense, of having as many as 2 or 3 million species living on earth?" (Dobzhansky, 1973, p. 127). This is an intelligent design argument, used poorly and in reverse. His argument is that good design would have fewer species; so, millions of species point to no design. Evolutionists are being arbitrary when they disapprove design arguments yet frequently use them for their own conclusions. Evolutionists are comfortable with Darwin, Dobzhansky, and Dawkins using design arguments to support evolution.

An economy with many, or even thousands, of providers of vital goods and services is far more robust than another, say under communism, which denies freedom and has few such providers. As a former program manager for Microsoft Corporation, it is easy to notice that the redundant ecological services provided by *multitudes* of species help to achieve the Creator's nonfunctional design requirements. The intelligent design of hardware and software engineers facilitates the *-ilities* of an entire computing system, including reliability, scalability, exploitability, extensibility, availability, maintainability, modifiability, compatibility, and stability.

Consider, though, in rejecting intelligence, Dobzhansky is forced to hand-wave away the law of biogenesis and the unfathomable hurdles that life would need to cross to arise from nonlife (Bergman, 2000; Christen et al., 2011; Shirber, 2012). Even if an assembly line of trillions of worlds filled with random chemical reactions finally assembled and folded a first protein into a usable form after billions of years, all you would have is a nonliving protein molecule. Life comes only from life.

Earth's deceased organisms have untold quadrillions of dead proteins decaying, yet nothing ever comes of them. And-forget billions of years and trillions of worlds-everything needed to form a first reproducing organism would all have to be present at the same moment in the same microsphere. Consider also that environmentalists warn of the ecological stress from the extinction of a single species. Yet believers in materialistic origins discount that the first emerging organism would have not even one single other species to provide it with biological services (e.g., Zuill, 1999, pp. 61-74). Forget the circle of life. Forget a diverse diet. And then, for such an undirected process to create life on Earth, it must also achieve the *ilities*, which is absurd in the highest degree from an engineering perspective.

In their war against the atheists who were more amenable to theistic evolution, the new atheists like Richard Dawkins and the late Christopher Hitchens are prevailing (i.e., selling more books). So, it is doubtful that Dobzhansky would get as warm a reception today if he wrote, "evolution is God's, or Nature's method of creation" (Dobzhansky, 1973, p. 127). Yet he never explains why diversity is evidence against creation instead of for creation. Dobzhansky does not say whether God would have to completely avoid niche species to meet with approval. His article is a good example of anti-creation authors who fail to distinguish evidence from rhetoric and who present their conclusions as though they were argumentation. By presenting interpretations as though they were observations, evolutionists create the illusion of scientific proof by misdirecting the readers' attention (ReMine, 1993).

Unity of Life

Dobzhansky (1973, p. 127) also offers a contradictory assumption that ubiquitous DNA suggests, "that life arose from inanimate matter only once." Then he adds contrariwise that "it is also possible that there were several, or even many, origins of life" (Dobzhansky, 1973, p. 127). Again he offers his conclusion as though it were evidence.

> If there was no evolution ... the antievolutionists must again accuse the Creator of cheating. They must insist that He deliberately arranged things exactly as if his method of creation was evolution, intentionally to mislead sincere seekers of truth (Dobzhansky, p. 127).

In this statement Dobzhansky momentarily switches sides to pretend, in the most transparent way, that he is not the one who would be accusing God. Yet he is. If evolution did not occur, as he believes, he is the one who without justification would accuse God, whereas creationists have long argued that claims about abiogenesis and about fossils being buried in an evolutionary pattern are facades. If man did not evolve from an apelike creature, then Dobzhansky (1973, p. 129) is the one who proposed the alternative explanation for Hawaii's fauna: "In a fit of absentmindedness, the Creator went on" to create a myriad variety of fruit flies. Perhaps by his own

forgetfulness, though, Dobzhansky (1973, p. 128) offered no justification for why he assumed that "biochemical universals" are "the most impressive" evidence for evolution and against creation.

Dobzhansky is the man most credited with developing today's reigning paradigm called neo-Darwinism, the evolutionary synthesis that brought Darwin into the DNA age (Modern Evolutionary Synthesis, 2002). Yet by overselling and misinterpreting the genetic science of his day, he led many scientists to believe that the rudimentary sequencing data initially collected had already cast the deciding vote for evolution. "Molecular studies have made possible an approach to exact measurements of degrees of biochemical similarities and differences among organisms" (Dobzhansky, 1973, p. 127). In an interview, geneticist Mary-Claire King recalls that in the early 1970s evolutionists began reporting (something later falsified) that people and chimps "share 98/99% of our genetic material" (King, 2009). Over the next decades Dobzhansky's supporters shouted exaggerated extrapolations from protein-coding DNA segments to claim proof of human evolution. Yet, now science has learned that 70% of sponge genes match ours, including genes to build structures that sponges lack, like nerves and muscles (Srivastava, 2010). Smithsonian paleobiologist Douglas Erwin admits that this "flies in the face of what we think of early ... evolution" (Mann, 2010, p. 673). Today's evolutionists constantly express surprise over their genetic findings, falsifying Dobzhansky's second expectation that DNA evidence would reinforce the claimed Darwinian lineages. Instead, multiplied discoveries, such as those listed in Table I, have led many career evolutionists to admit that Darwin was wrong about the tree of life (Lawton, 2009).

Dobzhansky (1973) trumpeted a tiny set of genetic data points from which he drew scientifically irresponsible conclusions. He incorrectly extrapolated from Table I. Summary of comparative genomics of human and various animals.

- Horse DNA is closer to bats than to cows (Nishihara et al., 2006).
- The chimp Y chromosome is "horrendously different" from our "Y," with 30% that does not align (Buchen, 2010).
- Kangaroo DNA unexpectedly contains huge chunks of the human genome (Cooper, 2008).
- Neanderthal DNA is closer to human than a chimp is to a chimp (Carter, 2009).
- The roundworm has far more genes than Darwinists presumed, 19,000 compared to our 20,500 (Human Genome Program, 1999).
- The flatworm genome has "alarmed" evolutionists, dislodging the "manbug ancestor" from its place at the base (Maxmen, 2011).
- A UC Davis study compared 2,000 genes common to humans, frogs, sea squirts, sea urchins, fruit flies, and nematodes to construct an evolutionary tree. They failed because "different genes told contradictory evolutionary stories" (Lawton, 2009, p. 39).

the tiny region of DNA for 18 species that codes for cytochrome c, whereas, as indicated above, the tens of thousands of genes and billions of base pairs from the nearly two hundred species now fully sequenced often tell stories that contradict Dobzhansky's. He also wrote that "alpha chains of hemoglobin have identical sequences of amino acids in man and the chimpanzee, but they differ in a single amino acid (out of 141) in the gorilla" (Dobzhansky, 1973, pp. 127–128). Since then, however, geneticists have encountered "puzzling surprises," notably, "15% of human genes look more like the gorilla version than the chimp version" (Smith, 2012).

If Dobzhansky had selected a different group of 141 base pairs, out of billions, perhaps evolutionists would have spent decades claiming that the gorilla was closest to man. For example, had he selected the gene for cytochrome b, he would have found it provided an absurd phylogeny of mammals, regardless of the method of tree construction. Cats and whale [fall] within primates, grouping with simians (monkeys and apes) (Lee, 1999, p. 177).

Moreover, evolutionists have proffered cytochrome c type arguments from Dobzhansky's time until today. These conclusions suffer from insignificantly small data sets, from special pleading of such data (Williams, 2008), and from ignoring the overall crush of conflicting genetic data. Instead of cytochrome c, "if you draw BovB's family tree, it looks like you've entered a bizarre parallel universe where cows are more closely related to snakes than to elephants, and where one gecko is more closely related to horses than to other lizards" (Yong, 2013). As Sarfati (2011, p. 114) presents Michael Denton's rebuttal,

When comparing the amino acid sequence of cytochrome C of a

bacterium (a prokaryote) with such widely diverse eukaryotes as yeast, wheat, silkmoth, pigeon, and horse, all of these have practically the same percentage difference with the bacterium (64–69%). There is no intermediate cytochrome between prokaryotes and eukaryotes, and no hint that the "higher" organism such as a horse has diverged more than the "lower" organism such as the yeast.

Regarding proteins that are "quasiuniversal" and "functionally similar in different living beings" (Dobzhansky, 1973, p. 127), Dobzhansky again seems unaware of the rebuttal that common design points to a common Designer (see Sarfati, 2011, pp. 112-113). Also, the literature today is filled with counterexamples to Dobzhansky's hemoglobin claim. For example, evolutionists would not expect the same amino acid sequences for echolocation in bats and dolphins (Liu et al., 2010), nor the exceedingly unique coding for an antigen receptor found both in camels and llamas-and sharks (Flajnik et al., 2011).

Comparative Anatomy and Embryology

Again, in this section of his famed paper, Dobzhansky (1973, p. 128) fails to recognize that similar designs, such as with "homologous bones in ... man and bird" could be evidence of a common Designer. Perhaps he omitted that creationist explanation because he disagreed with it. However, he carefully describes an evolutionist claim that he appears to disagree with, Ernst Haeckel's "so-called biogenetic law" (Dobzhansky, 1973, p. 128) that the embryo visibly reenacts its species' stages of evolution with monkey tail, fish gills, yolk sac, etc. What survival advantage would natural selection confer by the embryo putting on such a show? Dobzhansky (1973, p. 128) admits that this bizarre yet diehard theory "is no longer credited," but he softens this fact by adding, "in its

original form." And again, he presents an observation that fully supports creationists' claim of a common Designer, but he pretends that it supports only evolution. "The sedentary barnacles ... pass through a free-swimming larval stage," and since at that stage they "look unmistakably similar" to a one-eyed freshwater crustacean called a Cyclops, they "are evidently relatives" (Dobzhansky, 1973, p. 128).

At this point in his article the gill slits reemerge. He claims "the presence of gill slits in human embryos ... is another famous example" (Dobzhansky, 1973, p. 128). Within a single paragraph, the "biogenetic law" is back and re-credited with Haeckel's primary claim of fact, which has been refuted by embryologists because the human embryo never develops gills or gill slits. This world-renowned evolutionary biologist was flatly wrong. Even Dawkins (Dawkins and Wright, 2010) admitted that Haeckelironically the founder of the Association for the Propagation of Ethical Atheism (Kaiser Honors Haeckel, 1907, p. 1)published drawings that were a "mistake" and that it "was a mistake" for textbooks to have introduced them. Haeckel was publicly confronted with his fraud by a credentialed anatomist, and his drawings were again proved fraudulent in 1997 by a team assembled by a St. George's Hospital Medical School embryologist (Grigg, 1998, pp. 49–51). Searching the classic, Grey's Anatomy, for "gills" and "gill slits" returns "no results found." As could be done with the development of most anatomical structures, like the heart, limbs, and eyes, evolutionists simply identify analogous structures in various species and then claim that those somehow vindicate Haeckel's theory. Today, even the virulently anti-creationist Wikipedia rejects both Haeckel's recapitulation theory and his human gill slits claim (Recapitulation Theory, 2001; Pharyngeal Slit, 2005). And years before Dobzhansky's article, his own colleague and fellow architect

of the modern synthesis, famous evolutionist George Gaylord Simpson, had concluded, "it is now firmly established that ontogeny does not recapitulate phylogeny" (Simpson and Beck, 1965, p. 241). Yet millions of students are still taught recapitulation and the human embryo gill slit claim, apparently because Haeckel's and Dobzhansky's illusions are "too big to fail."

Then, irresponsibly ignoring decades of evolutionists who had falsified Haeckel's claim, Dobzhansky asks, "Why should it have unmistakable gill slits unless its remote ancestors did respire with the aid of gills?" (Dobzhansky, 1973, p. 128). Since it does not, then perhaps they did not. Dobzhansky's defenders should admit that the baby in the womb does not have respiratory slit remnants. Again, specific evidence Dobzhansky relied upon turns out to be wrong.

Strength and Acceptance of Evolutionary Theory

Evolutionists have faithfully repeated Dobzhansky's allegation that creationists "string ... together quotations, carefully and sometimes expertly taken out of context" (Dobzhansky, 1973, p. 129). However, quote mining, as with any mining, is most fruitful when the vein is deep, rich, and wide. Leading evolutionists continue to make knee-jerk reactions against references from creationists even, as is typical, where no one has implied that the evolutionary scientist being quoted has now rejected Darwinism. Significantly, we quote the testimony of hostile witnesses because these statements tend to be the most credible for an evolutionist.

Dobzhansky's penultimate claim was to psychoanalyze science-educated creationists, alleging that they reject evolution either due to "emotional blocks" or "bigotry," and his concluding paragraph praises "one of the great thinkers of our age, Pierre Teilhard de Chardin" (Dobzhansky, 1973, p. 129), whose mis-

takes include introducing to the world the "missing link" called the Piltdown Man. Both Gould and Louis Leakey cast suspicion on this "great thinker," without proof, of being involved in perpetrating the fraud (Birx, 1997). Dobzhansky (1973, p. 129) quotes de Chardin: "Is evolution a theory ...? It is much moreit is a general postulate to which all theories ... must henceforward bow ... Evolution is a light which illuminates all facts." Interestingly, while it would not have occurred to Dobzhansky, it was not evolution theory but intelligent design (ID) methodology, identifying "intent" as opposed to otherwise "natural causes," that illuminated the fact that Piltdown Man was a fraud (see ReMine, 1993, p. 30).

Ironically, *Nature* published a 2006 letter from a German biology professor urging that, "young-Earth creationists ... should read the 1973 essay in which Dobzhansky—an open-minded, nondogmatic theist—thoroughly refuted their irrational claims" (Kutschera, 2006, p. 26).

Finally, to address head-on Dobzhansky's primary claim, that "nothing in biology makes sense except in the light of evolution," consider first the technologies of biology and medicine and, second, the last four decades of applied biology and actual discoveries. Hundreds of technologies and inventions were enabled by the discoveries of Kepler, Bacon, Galileo, Harvey, Pascal, Boyle, Newton, Dalton, Faraday, Pasteur, Joule, Kelvin, Lister, the Wrights, and Carver-all creationists. What invention or technology required Darwinism? Even the medical technologies and inventions like Pasteurization, X-ray, EKG, blood transfusion (think William Harvey), EEG, MRI (creationist Raymond Damadian and others), DNA sequencing, the Gene Gun (Cornell's creationist John Sanford), required nothing from Darwin. Rather, heavyhanded evolution theory cost thousands of Christians a future in science (Bergman, 2008), cost millions of people their tonsils, and billions of DNA base pairs labeled as "junk" their rightful attention.

Just as the Marxists spent decades inventing economic interpretations of everything, so too evolutionists endeavor to create Darwinian explanations for everything (Prager, 2012), except for Darwinism itself, which explanation would be survival of the politically correct. Ignoring Darwinian narratives of alleged deep time and considering instead actual biological discoveries, such as those that earn Nobel Prizes, evolution is surprisingly irrelevant according to dozens of the world's leading scientists, as assessed by a member of the prestigious National Academy of Sciences. Philip Skell reports that he "asked more than 70 eminent researchers if they would have done their work differently if they had thought Darwin's theory was wrong. The responses were all the same: No" (Skell, 2005, p. 10).

Decades worth of Nobel Prizes awarded for discoveries in the life sciences falsify Dobzhansky's third and key expectation, that nothing in biology would make sense apart from evolution. Those awards track worldwide progress in biology and therefore should be able to catalog amazing evolution-based discoveries. However, the late Pennsylvania State University professor Dr. Skell summed up the actual history of the Nobel Prize in physiology and medicine.

I decided to explore this further by examining the 100 Nobel Prizes in biology-related areas over the last century. And I could not find among them any that had been awarded the Nobel Prize for their breakthrough discoveries that I could recognize depended upon Darwinian concepts to design the experimental work on which their discoveries were based. ... So here again, the Darwinian theory did not provide the guidance that was necessary for those great breakthrough discoveries (ID the Future, 2007).

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