Creation Matters

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Does Orthodox Darwinism Demand Atheism?

by Jerry Bergman Ph.D.

Judge Jones, in his 2005 Dover, Pennsylvania Intelligent Design court decision, concluded that no contradiction exists between Darwinism and theism (Katzmiller, et al., 2005, p. 136). The judge ruled that:

> Both Defendants and many of the leading proponents of ID make a bedrock assumption which is utterly false. Their presupposition is that evolutionary theory is antithetical to a belief in the existence of a supreme being and to religion in general. Repeatedly in this trial, Plaintiffs' scientific experts testified that the theory of evolution represents good science, is overwhelmingly accepted by the scientific community, and that it in no way conflicts with, nor does it deny, the existence of a divine creator.

Many eminent biologists strongly disagree with Judge Jones. For example, the late Harvard Professor Stephen Jay Gould, one of the most well-known evolutionary biologists of the last century, wrote (2001, p. xi) that

> No scientific revolution can match Darwin's discovery in degree of upset to our previous comforts and certainties… Evolution substituted a naturalistic explanation of cold comfort for our former conviction that a benevolent deity fashioned us directly in his own image, to have dominion over the entire earth and all other creatures.

Gould (1991, p. 13) also concluded that humans are a "tiny and accidental evolutionary twig … a little mammalian afterthought with a curious evolutionary invention" called the human brain. He (Gould, 1991, p. 15) rejected the idea that the "improbability of our evolution indicates divine intent in our origin." Rather, humans are "pitiful latecomers in the last microsecond of our planetary year" (Gould, 1991, p. 18). Gould (2001, p xiii) has made it clear elsewhere that Darwinism demands atheism, having added that

> ...although organisms may be well designed, and ecosystems harmonious, these broader features of life arise only as consequences of the unconscious struggles of individual organisms for personal reproductive success, and not as direct results of any natural principle operating overtly for such "higher" goods … by taking the Darwinian "cold bath," and staring a factual reality in the face, we can finally abandon the cardinal false hope of the ages — that factual nature can specify the meaning of our life by validating our inherent superiority, or by proving that evolution exists to generate us as the summit of life's purpose.

Kansas State University professor of biology Scott Todd (1999, p. 423) defined the stark contrast between the two worldviews that Judge Jones ruled "in no way conflict" as follows:

> The crucial difference between what the creationists believe and what the proponents of evolutionary theory accept concerns the issue of whether the origins of life were driven by randomness or by an intelligent creator.

In other words, actions by an intelligent creator and the effects of randomness are diametrically opposed, two ends of a dichotomy separated by a chasm.

Professor Nigel Williams (2008, p. R579) was even more blunt, writing that Darwin "destroyed the strongest evidence left in the nineteenth century for the existence of a deity." Professor F.J. Ayala explained in detail why evolution rules out theism, namely that Darwinism negates the

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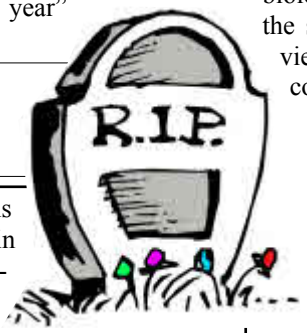
Planet Pluto 1930–2006

by Danny R. Faulkner, Ph.D.



Pluto is no longer a planet, so ruled the International Astronomical Union (IAU), the governing body of such matters, in a contentious vote taken during the IAU's most recent triennial meeting in August 2006 in Prague. Pluto's status as a planet had been in jeopardy for a number of years. Pluto was discovered in 1930 after a lengthy search for a hypothetical planet that supposedly had been providing a gravitational tug on Neptune, which up until then had been the planet most distant from the sun. However, its faintness right away suggested that Pluto was a small world, too small to have enough mass for its gravity seriously to affect the orbit of Neptune.

These suspicions were confirmed in 1979 when astronomers discovered that Pluto had a satellite, Charon. Observing the orbit of Charon allowed astronomers to "weigh" Pluto. The mass of Pluto turned out to be only 0.25% of the mass of the earth, and merely 5% the mass of Mercury, the smallest planet if one does not count Pluto. During the mid 1980s Pluto and Charon experienced a series of mutual eclipses as seen from the earth. This opportunity gave astronomers the rare chance to measure directly the sizes of Pluto and Charon.

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Pluto ... RIP

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Pluto turned out to be 18% the diameter of the earth, and less than half the size of Mercury. Incidentally, Charon is about half the size of Pluto. Many astronomers thought that Pluto is too small to be a planet.

Other issues call into question Pluto's planetary status. Astronomers long have recognized that the other eight planets fall into two distinct categories, terrestrial (earth-like) and Jovian (Jupiter-like). The terrestrial planets include Mercury, Venus, earth, and Mars. The Jovian planets consist of Jupiter, Saturn, Uranus, and Neptune. The two types of planets differ several ways. Terrestrial planets are closer to the sun; the Jovian planets are far from the sun. Terrestrial planets are small, while Jovian planets are large. Terrestrial planets have high density, consistent with rocky composition, but the Jovian planets have low density, which means that they are made mostly of hydrogen and helium. Jovian planets rotate quickly, while terrestrials generally rotate more slowly. Jovian planets have ring systems and many satellites, while terrestrial planets do not have rings and few, if any, satellites.

How does Pluto fit into this? If we consider size, rotation period, and its likely lack of rings, then it would be a terrestrial planet. However, according to Pluto's distance from the sun, its density, and the number of its satellites, Pluto is a Jovian planet. Pluto's failure to fit the general scheme of planets further suggested that we ought to exclude Pluto as a planet.

In the past dozen years, other discoveries have made Pluto's status murkier. Since 1994, astronomers have been finding other bodies orbiting the sun along with Pluto, beyond the orbit of Neptune. Since these are small bodies that orbit the sun and do not have obvious comet characteristics, they are treated as minor planets, the preferred scientific name for asteroids. Apparently similar to Pluto in composition, these objects now number in the hundreds and are supposedly members of the Kuiper belt, the hypothetical source of short period comets. Astronomers have two names for this class of objects, Kuiper belt objects (KBOs) and the less presumptuous trans Neptunian objects (TNOs).

We must take caution that we do not take the changing ideas of man too seriously, but instead rely upon the unchanging word of God. We must even be careful not to take our scientific theories based upon creation too seriously.

Several of the TNOs are more than half the size of Pluto, and in 2005 astronomers found that one, 2003 UB_{313}, is slightly larger than Pluto is. This minor planet eventually received the designation 136199 Eris (the number refers to the order of asteroid confirmation and naming). It is almost certain that astronomers will find more TNOs larger than Pluto. Thus, this raises a large problem. If Pluto is a planet, can we legitimately deny planetary status to newly discovered objects larger than Pluto or to those nearly as large as Pluto? If not, then we likely will soon see scores, if not hundreds or even thousands of new planets.

What is a planet?

Astronomers have been wrestling with how to deal with these new objects, and with Pluto in the light of these new objects. Many people, astronomers included, would like to continue numbering Pluto among the planets for traditional and historical reasons. Part of the problem is that we have never had a concise definition of what a planet is. As long as planets were far larger than the much smaller bodies orbiting the sun, asteroids (or minor planets), this was not a problem. However, recent discoveries have blurred that distinction. Another problem is that the line of demarcation between planets and smaller solar system bodies is going to be arbitrary. However, arbitrariness is offensive to the scientific sensibilities of many scientists; so many proposals to define a planet went to great lengths to avoid the appearance of being arbitrary. A definition of a planet probably must include several factors.

Prior to the IAU meeting, a committee was charged with drafting a proposal for a definition of a planet. First, the committee

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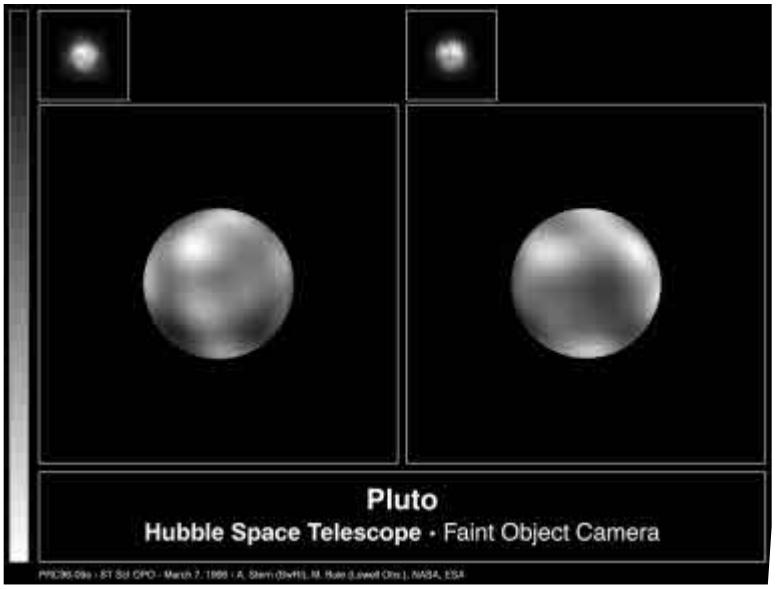
agreed that a planet must be a large object orbiting the sun. However, how large is large? In answer to that question, the committee secondly agreed that a planet must have enough mass so that its gravity has formed itself into a sphere. This definition fits all of the "classical" planets. However, this definition includes other objects as well, such as Pluto, Eris, and Ceres, the first asteroid, which was discovered in 1801. Thus, this definition would include 11 planets. By the way, any object, no matter how large, that orbited a planet rather than the sun outright, is a satellite. However, the committee decided to include Pluto's satellite, Charon, as a planet, even though it orbits a planet. The reasoning of that committee apparently was that Charon so closely matches Pluto in size that the two rather constitute a binary planet. This would have brought the planetary total to 12, with the promise of many more planets to come. Beyond the discovery of new objects, some previously known asteroids, such as Pallas, Juno, and Vesta likely will turn out to be spherical as well.



PIA00825: The Surface of Pluto.
The two smaller inset pictures at the top are actual images from Hubble. The larger images are from a global map constructed through computer image processing performed on the Hubble data. The tile pattern is an artifact of the image enhancement technique. Opposite hemispheres of Pluto are seen in these two views.
Photo courtesy of NASA; image credit to Alan Stern (Southwest Research Institute), Marc Buie (Lowell Observatory), NASA, and ESA .
http://photojournal.jpl.nasa.gov/catalog/PIA00825

Ultimately, the members of the IAU present and voting on the last day of the meeting essentially rejected this definition. Actually, they accepted the first two parts of the definition, but rejected the Charon exception, and they adopted a third criterion. That criterion is that a planet's gravity must have cleared its orbit of debris. Since Pluto orbits amongst the other TNOs and even crosses into Neptune's orbit, it has failed to clear its orbit. The same is true of any other TNOs. Furthermore, other large asteroids, such as Ceres, orbit within the debris of the asteroid belt, so this definition excludes any asteroids now known or likely to be found. In short, this definition fixes the number of planets at eight.

This definition is very controversial. For instance, Pluto crosses Neptune's orbit, so Neptune has not cleared its orbit. Jupiter's orbit is littered with many small asteroids collectively called the Trojan group, so Jupiter apparently has not cleared its orbit either. For that matter, earth is menaced by thousands of near earth orbit (NEOs) asteroids that could fall to the earth's surface. Thus, if taken at face value, probably none of the planets strictly fulfill this definition. The astronomers probably meant to say that a planet must have cleared its orbit of comparably sized objects. The asteroids just mentioned are far smaller than their nearby planets, and Pluto is far smaller than Neptune is. This definition of a planet is controversial; proponents of Pluto as a planet have vowed to revisit the question. At the very least, the definition will probably be tweaked at future meetings.

Lessons to learn

What does all of this mean to the creationist? On the surface, it probably does not mean much. However, we may offer two observations. First, this battle over just what a planet is illustrates the changing nature of science. We may find yet that the number of planets will fluctuate until it finally settles down again. We must take caution that we do not take the changing ideas of man too seriously, but instead rely upon the unchanging word of God. We must even be careful not to take our scientific theories based upon creation too seriously. What would have happened if we had based our ideas of creation upon Pluto being a planet?

Second, we should carefully consider even seemingly innocuous definitions for evolutionary bias. The first two criteria which were adopted, orbiting the sun and having sufficient gravity to be a sphere, seem harmless enough, but consider the third criterion about clearing its orbit. This sounds reminiscent of the theory of solar system and planetary origin. The solar system supposedly began as a cloud of gas and dust that collapsed. Most of the material allegedly fell to the center to form the sun, while the remaining material flattened into a disk. Out of the disk, matter gradually began to coalesce into small particles that astronomers call planetesimals. Planetesimals slowly amalgamated into larger planetesimals until some were large enough to gravitationally attract others. Once a planetesimal became this large, its gravity was sufficient to clean out its immediate environment, leaving it as the one large body within some range orbiting the sun. Over evolutionary time scales, planets supposedly were capable of doing this. However, the asteroid belt lacks any planet-sized object, possibly because of the influence of nearby Jupiter's gravity. For some reason, no dominant object ever emerged beyond Neptune, so there is no planet there. It is certain that this kind of thinking heavily influenced the astronomers who voted on the definition.

Creationist response

How ought creationists to respond? In conversations with other creation astronomers, we cannot agree on how many planets there are! Our creation model is not of much help but, given the rancor among secular astronomers voting in Prague, the evolution model is not much help either. Personally, I see a clean break in size and mass between Mercury and Pluto, and given the poor fit of Pluto among the planets, I like to define Mercury to be the minimum size for a planet. Other creation astronomers would like to see Pluto included as a planet for historical reasons. Apparently, none of us wants to see the number of planets greatly expanded.

It would be good if this whole issue would spur us to develop a better creation model for the solar system. For instance, we might wish to address such questions as why there is an asteroid belt (or belts) and why there are two types of planets.

—CM—

...without excuse!

by Timothy R. Stout

The Testimony of The Mirror

Chirality and Chiral Instability

Like shoes and gloves, biological molecules can exist in left-handed and right-handed forms which are mirror images of each other. This property is called "chirality." The Greek word for hand is "cheir"; thus "chiral" is simply a fancy way of saying "handed."

In the previous issue of *Creation Matters*, David Coppedge discussed how "Life uses only single-handed (homochiral) molecules for proteins and DNA." Furthermore, he noted that scientists today consider this fact to be "'one of the great mysteries of the origin of life.'" (Coppedge, 2008, p. 11)

The amino acids used in proteins, including enzymes, are made up exclusively of left-handed forms. Proteins derive their functionality from their shape. To create the proper shape, a long string of amino acids is first folded into various kinds of sheets and coils. Connecting loops are then used to join everything into the specifically required shape. However, the substitution of just a single right-handed amino acid within a sheet or coil prevents the protein from folding properly. This, in turn, destroys the shape of the entire protein and causes it to denature, losing its functionality.

Biochemists totally miss the point when they discuss how initial chirality might have come about. The real problem is not initial chirality — it is chiral instability. Many chiral molecules are unstable. For instance, aspartic acid makes up an average 5.3 percent of the amino acid composition of a typical enzyme (Voet, 2006, p.79). This is significant because about one out of 1,200 aspartic acid molecules spontaneously flips chirality per year (Fujii, 2005).

Thus, a 400-amino acid enzyme might contain an average of about 20 aspartic acid molecules. This means that the odds are about 1 in 60 that one of the enzyme's molecules will flip states within a year. At this rate, the enzyme has only about a fifty-percent chance of surviving 40 years before a chiral flip destroys it (see endnote). Conversely, if a cell does not somehow manage to remove its damaged enzymes, in about 40 years about half of its enzymes will have denatured. The cell will die long before this occurs.

As an illustration, there is some indication that it is the reduced ability of the body to deal with chiral changes in brain tissue that causes Alzheimer's disease. When an enzyme loses its shape because of a chiral change, it tends to form a cellular deposit called "β- amyloid protein." Alzheimer's disease is caused by an accumulation of these deposits into a mass of tar; this accumulation eventually kills the cell containing it. Analysis has showed a significant number of the right-handed forms of two particular amino acids, aspartic acid and serine, in β-amyloid proteins (Fujii, 2005). It appears that Alzheimer's disease is a product of a faulty maintenance system, one that can no longer properly function.

Thus, the problem of chirality is far more serious than the evolutionist appreciates. While he is focusing on the issues of how initial chirality could develop, he is overlooking a more significant fact. Even if he somehow started with nothing but left-handed amino acids, in less than forty years so many of them would have spontaneously flipped chirality as to interfere with a naturalistic origin of life. Either a fully functioning cell that is capable of dealing with chiral changes is going to develop from scratch in less than forty years, or chiral changes will undo whatever evolutionary progress might have been made.

Forty years is far, far too short a period of time for natural processes to start from scratch and develop a fully functioning cell, one complete with energy systems, a large body of information stored in DNA, an information-decoding system, a nutrient-digesting system, a waste-removal system, a cell-wall system, a replication system, and a maintenance system — particularly, a maintenance system adequate to deal with proteins denatured through chiral changes. Even evolutionists will acknowledge this.

In Romans 1:19-21, God says that those who do not acknowledge Him as Creator are without excuse. I believe He has deliberately placed evidences of His existence at every level of His creation. For the technically-minded and informed person, chirality and chiral instability are among the kinds of issues that God deliberately used to demonstrate that His creation requires a living God as its Creator.

"Praise *the Lord* for His mighty acts; praise Him according to His excellent greatness!" Psalm 150:2

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Endnote

For details about this probability calculation, see the author's explanation at www.creationtruthoutreach.org/files/Chiral_Instability_Calculations.doc

Speaking of Science

Commentaries on recent news from science

Editor's note: Unless otherwise noted, S.O.S. (Speaking of Science) items in this issue are kindly provided by David Coppedge. Opinions expressed herein are his own. Additional commentaries and reviews of news items by David, complete with hyperlinks to cited references, can be seen at: www.creationsafaris.com/crevnews.htm. Unless otherwise noted, emphasis is added in all quotes.

Darwin's Wrong Turn in Argentina

When the *Beagle* was sailing the coast of Argentina in 1834, it stopped at the mouth of the Santa Cruz River. Twenty-five-year-old Charles Darwin, who had been reading Lyell's *Principles of Geology*, explored the area on foot as the crew made camp on the cliffs. Darwin was impressed by the six-mile-wide canyon with its comparatively small river. He was led from his reading of Lyell to assume that this was another example of the cumulative power of small processes to produce big changes over vast periods of time.

Geologist Steven Austin recently visited Camp Darwin at the Santa Cruz canyon. He examined the basalt cliffs and cobbles with a geologist's eyes and came to a quite different interpretation.[1]

> What I saw at Camp Darwin utterly **shocked** me. I saw **abundant evidence for a colossal flood** that must have **rapidly performed significant erosion** in the valley.

Austin further explained that the nature of the cliffs, the basalt being on one side and not the other, and the large rounded boulders on top of the cliff (some as big as 15 feet in diameter), and other evidences speak clearly of catastrophism, not uniformitarianism. This incorrect assumption, he believes, was young Darwin's first wrong turn that led him to view the world evolving through slow, gradual accumulations of small changes. Austin has posted a 10-minute video on *YouTube* explaining his findings, with footage shot on location where he points to evidences you can see for yourself.[2]

This is a good example of how the glasses through which you view the world can color everything. Darwin read the world with his Lyell glasses on. Because those glasses blocked certain wavelengths, he failed to see evidence that was right in front of his nose.

1. Austin, S.A. 2009. Darwin's first wrong turn. *Acts & Facts* 38(2):26. Retrieved Feb 16, 2009, from www.icr.org/article/darwins-first-wrong-turn
2. www.youtube.com/watch?v=3darzVqzV2o

Modeling Solar Cells on Butterflies

Sunlight is free — if we could just learn how to use it better. For decades, engineers have been trying to improve the efficiency of solar cells. Why not look at nature? *ScienceDaily* reported on work being done in China and Japan:[1]

> The discovery that butterfly wings have scales that act as tiny solar collectors has led scientists in China and Japan to design a more efficient solar cell that could be used for powering homes, businesses, and other applications in the future.

Artificial solar cells struggle to attain 10% efficiency. The scientists are finding that butterfly wings not only collect light more efficiently, they are easier to work with. The fabrication process is simpler and faster than other methods, and could be used to manufacture other commercially valuable devices, the researchers say.

Don't let evolution take credit for these kinds of stories. Biomimetics has intelligent-design science written all over it. For a feast of biomimetic wonders, see 15 examples at *brainz.org*.[2]

1. American Chemical Society (2009, Feb 5). Natural solar collectors on butterfly wings inspire more powerful solar cells. *ScienceDaily*. Retrieved Feb 16, 2009, from www.sciencedaily.com/releases/2009/02/090204170548.htm
2. Anonymous. n.d. The 15 Coolest Cases of Biomimicry. *brainz.org*. Retrieved Feb 16, 2009, from http://brainz.org/15-coolest-cases-biomimicry/

The Early Bird Gets the Just-So Story

If a catastrophic world event wiped out the dinosaurs, why did birds survive? They're smaller and more delicate, it seems. *National Geographic News* published a new hypothesis: they out-thought the doomed dinosaurs.[1]

> **Birds survived** the **global catastrophe** that **wiped out their dinosaur relatives** due to **superior brainpower**, a new study **suggests.**

A couple of seabird skulls alleged to be 55 million years old show a larger and more complex brain, researchers said in the *Zoological Journal of the Linnean Society*. This explanation, however, is not alone. Other reasons why birds survived the extinction include the location hypothesis (that they were distant from the catastrophe), and the coastline hypothesis (that coastal habitats were not as impacted as others). These hypotheses seem to ignore the dinosaur species living in the same lucky habitats.

The proponents of the bigger-brain hypothesis noticed that some birds went extinct, so "it wasn't feathers or warm-bloodedness that **gave modern birds a leg up**." It must have been the bigger brain, they said, even though, pound for pound, a *T rex* brain would seem much bigger than a hummingbird brain. Maybe it was the software, not the hardware — though by all accounts, dinosaurs must have had pretty good programming, because they showed a remarkable flexibility and tenacity in a variety of habitats for a long time. Why the Dodo emerged and *Velociraptor* perished is just one of those things that happens in evolution.

National Geographic ended the article with, "As well as **providing valuable new evidence for the evolution of birds** ... the latest study offers **an intriguing new theory** that will **motivate paleontologists** to look harder and farther to find more fossils." They desperately need more fossils, the lead author said. "We can only get so close to **understanding** the brains of the earliest birds with the sample of known species currently available."

We sincerely hope you enjoyed this bedtime story. Some day, if you think real hard, you might survive an extinction, too. You

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Math Matters

by

Don DeYoung, Ph.D.

Math and Tombstones

In this brief article we shall describe two examples of unusual mathematical epitaphs. Jakob Bernoulli (1654–1705) made major contributions to polar coordinate studies. He became intrigued with the logarithmic spiral, $r = a^{\theta}$ (Eves, 1969). This function has several interesting properties. The spiral occurs throughout nature on all scales, from the chambered nautilus to galaxies (Figure 1).

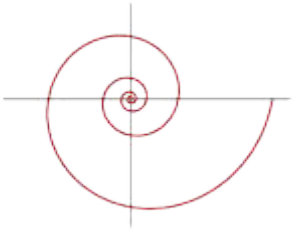

Figure 1. The logarithmic spiral which was to be engraved on the tombstone of Jakob Bernoulli.

Bernoulli asked that the spiral appear on his grave marker as a symbol of eternal life. A closely-similar Archimedean spiral was actually used (Figure 2). The tombstone may be found in Basal, Switzerland, along with the engraved phrase of Christian hope, *Eadem mutata resurgo*, "I shall arise the same, though changed" (translated).

Ludwig Boltzmann (1844–1906) did pioneer studies of laws involving gases and heat energy. In particular, he described the Second Law of Thermodynamics which states that heat energy is irretrievably lost in any heat transfer process. This second law also describes the way in which all things deteriorate and become less ordered over time. Non-acceptance of Boltzmann's ideas eventually led to his depression and suicide.

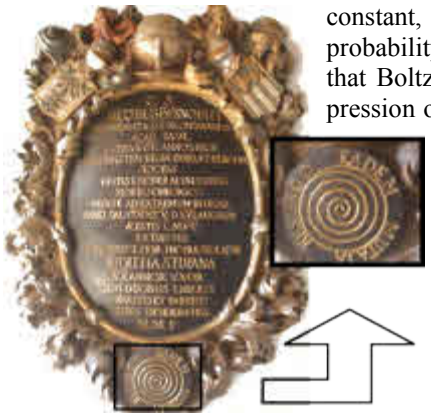

Figure 2. Bernoulli's tombstone with Archimedean spiral.(inset) at Basel cathedral. Photo by Wladyslaw Sojka, provided under terms of the GNU Free Documentation License.

His will requested that a mathematical formula describing the second law be placed on his tombstone. The unusual epitaph, $S = k \log W$, can be found in Vienna, Austria (Figure 3). The term S represents the entropy or disorder of a system, k is Boltzmann's constant, and log W is the thermodynamic probability of the system. It is interesting that Boltzmann's death is the ultimate expression of the second law.

Figure 3. Tombstone of Ludwig Boltzmann in Vienna, Austria. See inset for inscribed equation for entropy. Tombstone image from www.chemcollective.org/chem/MIT/images/boltzmann.jpg

Reference

Eves, Howard W. 1969. *In Mathematical Circles* Prindle, Weber and Schmidt, Inc., Boston.

News Release

Cedarville University Announces New Geology Degree

February 4, 2009 — Cedarville, Ohio

Cedarville University's Board of Trustees recently approved the formation of the Bachelor of Science in Geology degree, set to begin in fall 2009.

Faculty will equip students for lifelong scientific leadership in career fields such as hydrogeology, environmental geology, petroleum geology and numerous other areas of expertise.

"The degree will offer a whole host of new opportunities for graduates," shares Dr. John Whitmore, associate professor of geology who proposed the major. "Geologists help us find clean drinking water, petroleum, natural gas, coal, and valuable minerals."

The program will be unique in that no other Christian school, which holds to a literal six-day account of Genesis, offers geology as a major course of study to undergraduates. The course of study will be taught from both naturalistic and young-earth paradigms of earth history.

Dr. Whitmore and his students are examining large clastic dikes at the base of the Coconino Sandstone, in the Grand Canyon. Whitmore described the significance of these in CRSQ *v. 42(3):163-180, 2005.*
Photo credit: Scott L. Huck/Cedarville University

"It is extremely important to develop critical thinking skills within the minds of young scientists," explains Whitmore. "We believe that using a two-model approach of earth history will be advantageous to our students over others who are only taught a one-model, naturalistic approach. Geologists are important when it comes to thinking about earth history, especially within a biblical context."

Course work will be rigorous and emphasize hands-on experience along with required field work. The geology major will include a wide range of liberal arts classes along with calculus, physics, chemistry, biology, physical geology, historical geology, mineralogy, petrology, structural geology, stratigraphy, sedimentology, geomorphology, invertebrate paleontology, and environmental geology among other upper level areas of study. The major will prepare students for both graduate school and industry.

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... Demand Atheism?

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need for an intelligent creator. Ayala (2007, p. 8568) added that "Darwin's greatest contribution to science" is that he led the way to prove that natural law can create all that is real, and no need exists for an intelligent creator because "organisms could now be explained … as the result of natural processes, without recourse to an Intelligent Designer."

The Darwinian Revolution has resulted, in the minds of many Darwinists at least, in explaining away the task that once required a creator, a task which is now explained by blind unintelligent natural laws. Ayala (2007, p. 8568) explained that the reason is because "Darwin's theory of natural selection accounts for the 'design' of organisms, and for their wondrous diversity, as the result of natural processes, the gradual accumulation of spontaneously arisen variations (mutations) sorted out by natural selection." Ayala (2007, p. 8568) also concluded that

> Mutation and selection have jointly driven the marvelous process that, starting from microscopic organisms, has yielded orchids, birds, and humans. The theory of evolution conveys chance and necessity, randomness and determinism … this was Darwin's fundamental discovery, that there is a process that is creative, although not conscious.

What did Darwin know?

Darwin himself knew his theory not only supported atheism, but atheism was a logical result of his theory. Caton (2008, p. 3) wrote that "Although Darwin discouraged militant arguments against religion because they supposedly have little effect on the public, he nevertheless indirectly supported their use of his theory to propagate atheism." One example is that Darwin wrote in 1880, "It appears to me (whether rightly or wrongly) that direct arguments against christianity [sic] and theism produce hardly any effect on the public." He added (quoted in Caton, 2008, p. 3) that, instead of arguing directly against Christianity, converting people to atheism

> …is best promoted by the gradual illumination of men's minds, which follows from the advance of science [i.e., evolution]. It has, therefore, been always my object to avoid writing on religion [for publication], I have confined myself to science.

Darwin once said (Aveling, 1883, p. 5) that he was with atheists "in thought," even though he preferred "the word *agnostic* to the word *atheist.*" Ignored is the fact that, as noted in a review of Richard Dawkins' book *The God Delusion* (Appleyard, 2007, p. 47), Dawkins and other atheists usually totally ignore the faith-based nature of their own convictions:

> As Dawkins acknowledges and physicists have shown, the existence of conscious, rational beings is a wildly improbable outcome. To insist that we are simply the products of the workings of, ultimately, physical laws is to avoid the question of the nature and origin of those laws. To say there is no evidence for God is merely, therefore, an interpretation, justified in one context but quite meaningless in another. Everywhere we look, there is evidence of … something of a startling intelligibility.

Surveys of eminent evolutionists reveal that most agree with those anti-creationists quoted above. For example, Greg Graffin earned his Ph.D. in evolutionary biology at Cornell University under Professor William Provine. His thesis was on the religious beliefs of leading evolutionary biologists. The sample he polled consisted of 271 scientists, and he achieved close to a 56 percent return rate (N=151). Graffin found that almost 98.7 percent of his respondents rejected a traditional theistic worldview, due to, he concluded, evolution, and instead were functional atheists. He defined theism as a belief in a personal creative God as taught by the Christian, Jewish, and Muslim religions.

This view is wide-spread in science

Over 84 percent of the scientists that returned the questionnaire rejected *all* theistic religions, and most concluded that evolution serves as a *replacement* for theism. In this pool of world-famous scientists was a very rare scientist that tried to marry Darwinism and theism, a feat that Judge Jones claimed was very easy. Graffin (2004, p. 78) found that a rare few scientists attempted to harmonize Darwinism with theism, and an even rarer few tried to claim, as did one Ivy League paleontologist, that evolution is the fruit of "Gods love." Almost every scientist in his study recognized the unbridgeable gap between evolution and theism.

Graffin's Cornell Ph.D. dissertation (and his book) makes it clear that orthodox Neo-Darwinism (of which a central tenet is naturalism) and theism are at opposite ends of the spectrum. This is true not only for theism, but also of all of the major worldview questions. In Graffin's words (2004, pp. 21-22), "in most evolutionary biologists' view, there is no conflict between evolution and religion on one important condition: that religion is essentially atheistic." Graffin (2004, p. 38) concluded that his study has shown that "naturalism is a young, new religion" that is now the dominant religion among almost all leading Darwinists.

Given the validity of this study, Judge Jones has ruled that teaching a theistic worldview in state schools is illegal and only one worldview, that is, Darwinism, can be taught. Professor Scott Todd noted (1999, p. 423, emphasis added) that "it should be made clear in the classroom that science, including evolution, has not disproved God's existence because *it cannot be allowed to consider it*." He concluded (Todd, 1999, p. 423) that "Even if all the data point to an intelligent designer, such an hypothesis is excluded from science because it is not naturalistic." Professors Cobb and Coyne (2008, p. 1049) wrote that

> ...science is about finding material explanations of the world …. Religion, on the other hand, is about humans thinking that awe, wonder and reverence are the clue to understanding a God-built Universe …. There is a fundamental conflict here, one that can never be reconciled until all religions cease making claims about the nature of reality. The scientific study of religion is indeed full of big questions that need to be addressed, such as why belief in religion is negatively correlated with an acceptance of evolution.

They concluded (Cobb and Coyne, 2008, p. 1049) that efforts to bring religion and science in harmony will not bring science and religion (or "spirituality") closer to one another, nor bring about "advances in theological thinking" because the "only contribution that science can make to the ideas of religion is atheism."

Defending evolution

Atheists and secular humanists recognize the fact that evolution commonly leads to atheism and, for this reason, are at the forefront of defending it (Sharp and Bergman, 2008). In a British article subtitled "Grayling dissects a new defense of Intelligent Design," Grayling (2008, pp. 27–29) wrote that science has proven man-to-mol-

ecules evolution, and, as a result, "the more science, the less religion. And this is a universal phenomenon (see the Pew polls on the decline of religion, even in the USA)." It is for this reason that they fight so tenaciously to insure that Darwinism remains in the schools.

The chasm between evolution and theism is not the only concern of theists. Some theists object to what has now become "evolutionism" for other reasons. Noble Laureate Robert Laughlin concluded that evolution is actually anti-science. He wrote (Laughlin, 2005, pp. 168–169) that his concern is that much "present-day biological knowledge is ideological," which, he noted, involves explanations that have

> …no implications and cannot be tested. I call such logical dead ends antitheories because they have exactly the opposite effect of real theories: they stop thinking rather than stimulate it. Evolution by natural selection, for instance, which Charles Darwin originally conceived as a great theory, has lately come to function more as an antitheory, called upon to cover up embarrassing experimental shortcomings and legitimize findings that are at best questionable and at worst not even wrong. Your protein defies the laws of mass action? Evolution did it! Your complicated mess of chemical reactions turns into a chicken? Evolution! The human brain works on logical principles no computer can emulate? Evolution is the cause! … Biology has plenty of theories [to explain origins]. They are just not discussed — or scrutinized — in public.

In other words, evolution has become an explanation when none exists and, for this reason, interferes with investigations to find the real explanation by scientific research.

Conclusion

It is clear that the most eminent life scientists of our age agree — and they have expressed themselves in the strongest terms on the matter — that a clear unbridgeable contradiction exists between Darwinism and theism. Claims such as Judge Jones' that no contradiction exists between theism and Darwinism are not only naïve, but grossly uninformed.

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Speaking of Science

...continued from page 5

might outlive the bobble-headed professors who teach Darwinist nonsense in academia, oblivious to the fact that it is imploding.

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Darwinists Frustrated with Public

"The creationists got what they wanted," moaned Barbara Forrest, as reported in a *Science* magazine news article.[1] All they got was the right for teachers to use supplementary materials in Louisiana schools. This followed a "wave of so-called academic freedom bills," complained the author of the news item, who cited the opponents' view that the bill was no more than a "backdoor attempt to allow creationism and its variants into the classroom."

Meanwhile, in Seattle, the public is not tuning in to the city's "I Love Lucy" show. The Lucy exhibit (of the Johanson skeleton, not the TV reruns) is a bust. *The Seattle Times* reported that the $2.25 million exhibit at the Pacific Science Center is losing money fast due to lack of public attendance. Other museums are reconsidering whether to host the exhibit. PSC president Bryce Seidl blamed the economy and the weather. Chagrined at the low turnout, he said, "It's a powerful story of evolution and culture and history ... but we're not getting the attendance we need for an exhibit of this scale."

You can't gauge the value of something by the turnout, else everyone would go to classical music concerts. It is kind of funny, though. The Darwinists assumed the public would swoon over their idol like they do. If it were that special to them, they would brave the snow and pay the dough for it.

As to whether Louisiana teachers should have academic freedom, or whether students should be able to question evolution in the classroom, just imagine what a horrible thing that would be. When observing a heated controversy, one heuristic approach for deciding who has more credibility is to see which party wants both sides to be heard. Another is to see which side is capable of accurately articulating the position of the other side.

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Immune System Has a Code, Language and Memory

"**Decod**ing the **language** of **memory** cells" is the title of an article in *ScienceDaily*.[1] A researcher at the University of Missouri School of Medicine is using the concepts of codes, language, and memory to understand the way T-cells "remember" a pathogen to prevent later infections. "We are currently figuring

out which **signals** are important for **memory generation** and **protection**," said Emma Texeiro. "This is **important for improving vaccines** and tumor immunotherapies."

Two frequent criticisms of intelligent design are (1) that it necessarily requires belief in a supernatural God, and (2) that it brings science to a halt. Think about that in relation to this story. Dr. Texeiro is probably an evolutionist (we will assume that in the absence of information to the contrary). The question, though, is whether metaphysical naturalism or evolutionary theory was any help in her research. Words like *code, language, signal*, and *memory* refer to *information*. They are design words, intelligence words, function words, purpose words. They have nothing to do with chance and random motion of atoms. One can do science with the presumption that programmed function is present and discernible. Does that stop science? Of course not.

Her team is actively working to understand this coded system in an effort to improve medicine. For all practical purposes, she is pursuing her research *as if* intelligent design is scientific. It's not necessary for her to debate whether the assumed background intelligence that coded this information is natural or supernatural. The assumption of design is not a science-stopper; she is going full speed ahead, and we may all benefit.

What's the problem? Why are the anti-ID folk so adamant against ID? Why do they suppose that acknowledging the obvious, that design is apparent and can be understood, will put America in the Dark Ages? Has the commitment to evolutionary storytelling done something for you lately? Has it given you understanding? Has it benefited your health? The only thing evolutionary theory is good for is a belly laugh once in awhile. In a perverse sort of way, that can be good medicine.

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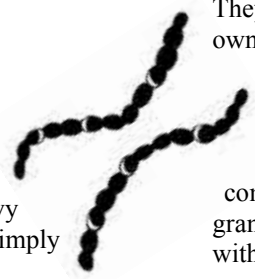
Minerals Can Fool Astrobiologists



Look at this picture on *National Geographic News*.[1] Looks alive, doesn't it? It's only a mineral. The article contains a gallery of five micrographs of minerals that form curvy crystals. They're called biomorphs (a word simply meaning life-like shapes).

"Until now scientists had thought rounded crystals, such as those found in seashells and bones, could only be made by living organisms," the caption for one of the photos says. "In such a case, fossilized curves in rocks from early Earth or even other planets would seem to be sure signs of life." The new crystals generated from carbonates by scientists in Spain, however, curve and twist like DNA and other biological forms.

They bring to mind the tantalizing forms in the Martian meteorite that launched the science of Astrobiology. The caption for picture five says, "by creating biomorphs such as the one above, the University of Granada's Garcia-Ruiz and colleagues have put **a serious dent in theories that rounded crystals are definitive signs of life**."

Nature mentioned the work with a little more cautious language:

> The work opens the way for new approaches to the **synthesis** of biological and **biomimetic materials**, and to the **exclusion of false positives** when looking for **life-like forms in poorly characterized environments**.[2]

The shapes have no more relation to life than a statue of Robert E. Lee to the actual general. It goes to show how people can see what they wish to see if not careful. This year there is an epidemic of delusional people looking into their crystal balls and seeing the prophet Darwin. Help them face reality. It just might lower your taxes.

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Darwin Missed the Pink Iguanas

The news media are excited about pink iguanas found in the Galapagos Islands. The rare type was discovered accidentally in 1986, but received almost no attention till now. Reports with pictures can be found on *LiveScience*[1] and other science news sites, based on the paper by Gentile *et al.* in *PNAS*.[2]

The "rosada" (pink) land iguana is similar in size and shape to a more common yellow variety on Isabela island, the largest island in the Galapagos archipelago. Darwin did not see any of these during his five-week tour. It is surprising no other scientist saw this population, either, for 150 years after Darwin's stopover. They live isolated on an extinct volcano named Volcan Wolf on the north end of Isabela island.

The scientists performed phylogenetic analysis of individuals and declared them to be the most basal land iguanas on the islands. They estimate they diverged 5.7 million years ago and went their own way genetically. This raises a conundrum, however; the island of Isabela, their sole habitat, did not form till half a million years ago, they believe. How did the pink form remain genetically isolated for so long when the populations were free to mix with others? Actually, they were found not to be completely isolated. One yellow iguana appeared to have a rosada grandparent, so hybridization, though rare, does occur (as it does with the finches).

> In any case, **incomplete reproductive isolation** between the rosada and syntopic yellow land forms is **not surprising** considering that **hybridization can still occur between marine and land iguanas, genera morphologically, ecologically, behaviorally, and genetically very distant.**

Is this evolution? They look nearly identical to the other land iguanas except for skin color and slight differences in head-bobbing behavior. There are more differences between people than between these iguanas. To be told that they have been genetically isolated ten times longer than the island they live on was separated from the others is a stretch; it's also not very helpful to evolutionary theory, because they believe humans came down from the trees and evolved philosophy in less time than that.

Phylogenetic analysis is fraught with dubious assumptions. Differences this small can take a lot less time to develop. *LiveScience* quoted the lead author saying, "The Darwin finches are thought to have differentiated later than the split between the pink and yellow iguana lineages." And just like the finches, the differ-

What Are Creationists Thinking about ...?

As new scientific discoveries make the headlines, have you ever wondered how your fellow creationists are reacting? Have you ever thought of a "crazy" new idea about origins and wanted to bounce it off another creationist?

Now you can keep in contact daily with creationists from all around the world. The Creation Research Society sponsors **CRSnet**, an online community of CRS members who have e-mail access to the Internet. Not only do participants discuss the latest scientific findings related to origins, but they also receive news about the CRS — its research, publications, and activities — and other creation-related news.

For more information, send an e-mail message to Glen Wolfrom at contact@creationresearch.org.
Participation is limited to CRS members in good standing.

ences are minor variations. No new genetic information, tissues, or organs "emerged" by Darwin's mechanism.

The news write-ups, nevertheless, are filled with references to Darwin, who had nothing to do with this. He didn't even see them. He came up with a tall tale after his voyage about how humans might have had bacteria ancestors. Why? Because he saw microevolutionary changes in finches, turtles, mockingbirds, and cacti in an isolated, desolate environment, and could not fit these observations into preconceived *theological* notions about how God would have done things. For this Darwin should be scorned, not praised.

Darwin's name would not be remembered except for his visit here, his 200th birthday, and the pressure of his disciples to associate his name with these islands that are full of amazingly hardy, well-adapted, created creatures (redundant, since *creature* refers to a created living thing). *All creatures of our God and King* was *not* written in praise of Darwin, despite the devotion of his subjects.

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Songbirds Sing on a Fast Wing

Purple martins and wood thrushes are common songbirds of the eastern United States. Until recently, it has not been possible to follow their movements accurately. Now, a team of biologists in Toronto, Erie, and Cambridge was able to track them with tiny geolocators. They found that the little birds fly farther and faster than previously known.

Reporting in *Science*,[1] the ornithologists found that most of the purple martins made it from Pennsylvania to the Yucatan (2500 km) in 5 days. That's 500 km, (over 300 miles), per day. Then the birds stopped over there for 3 to 4 weeks before moving south to the Amazon basin. Some of the wood thrushes that migrated from Pennsylvania spent a 2-4 week stopover in the southeastern United States before crossing the Gulf of Mexico. A couple of the monitored thrushes stopped also in the Yucatan before reaching wintering grounds in Honduras or Nicaragua.

As if that were not amazing enough, the return flights were 2 to 6 times faster. One female martin made the 7500 km trip from the Amazon Basin to Pennsylvania in 13 days – averaging 577 km (360 mi) per day. That includes 4 stopover days. The wood thrushes took 13 to 15 days to get home. One of them, oddly, took the overland route instead of crossing the Gulf of Mexico, requiring 29 days to complete the 4600 km route.

How do these new studies enhance our understanding of bird flight capabilities?

> Previous studies appear to greatly underestimate the true flight performance of migrating songbirds because spring migration speed has typically been estimated at under 150 km/day.[1]

National Geographic News reported on the story with pictures and a video.[2] The lead author commented on the purple martin front-runner, "Maybe this is some kind of super-bird, but still I was really impressed that any bird can do this. These birds are traveling really fast and breaking all the rules."

ScienceDaily also reported on the research. The geolocators, it said, are smaller than a dime and mounted on the birds' backs with thin straps around the legs, hopefully not interfering with flight. One can only wonder if the record-setting female martin might have bested her own time without the backpack.

This bird didn't break any rules. God didn't put speed limit signs on the route. He equipped these amazing creatures with awe-inspiring capabilities and let them loose to fly like they were designed to do, at their own pace. We can watch the race like sports fans.

This is another story that owed nothing to Darwin. Neither the original paper nor the popular write-ups even mentioned him. Darwinists keep saying that nothing in biology makes sense except in the light of evolution. This science project did just fine in natural ambience without the black lights.

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Brilliant Blue Butterflies

Various organisms recognize specific colors in their survival and reproductive strategies. Among the most brilliantly colored of all insects, male *Morpho* butterflies display spectacular shades of blue. Intense wing coloration serves to intimidate other males as they compete for the best breeding locations.

Studies of these butterflies show that the blue coloration is not produced by pigments, but rather by the fine microstructure of the scales that cover the wings. The scales covering the wings, which are actually dark brown in color, have repeating patterns of longitudinal ridges. In cross-section, these structures resemble tiny rows of Christmas trees. The exact dimensions of these structures are wavelength-specific and specifically reflect blue light, with the number of "branches" corresponding to the intensity of the reflected blue light. Subtle angulation of the "branches" causes the blue light to disperse widely over an angle range of over 100 degrees, making these creatures visible from almost any angle when they are flying.

Morpho amathonte, *native to Central America. Photo by J.C. O'Quinn, from his private butterfly collection.*

One species of *Morpho* butterfly has a second layer of special scales on top of the first layer that serves to even further disperse the reflected blue light. These structures are so specialized, they can reflect more that 70% of all blue wavelength light that shines on the wings, which can be seen from half a mile away, even from low-flying aircraft.

Making matters worse for evolutionists, the photoreceptors of these butterflies' eyes happen to be maximally responsive to blue light, suggesting that neither component of this biological system appeared by chance or in stages.

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