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# The Human Evolution Parade: The Most Famous Icon of Evolution Is Fraudulent

by Jerry Bergman, Ph.D.

y far the most famous icon of evolution — seen everywhere including on book covers, in magazine articles, and even in cartoons — is a drawing showing human evolution from a primitive stooping ape-like creature to a modern human, usually pictured in four to six steps. The parade was first illustrated in a best selling *Time-Life* nature library series book titled Early Man by University of California, Berkeley, Professor F. Clark Howell. The parade was printed in a 36-inch fold-out on pages 41 to 45 in the 1965 edition and reprinted in both the 1968 and 1973 editions. The original chart included 15 pictures that traced human evolution from Pliopithecus to Ramapithecus to Homo erectus, all the way to Cro-Magnon and, last, modern man.

Volume 13, Number 4

M. Lubenow concludes that this parade "has been one of the most successful tools ever used to promote human evolution. It constituted powerful visual 'proof' for human evolution that even a small child could grasp. It was a masterpiece of Madison Avenue promotion" (2004, p. 39).

The parade has been prominently

displayed in social science classes, biology classrooms, and on school library bulletin boards for decades. Because of its graphic power, the progression is "indelibly etched into the minds of billions of people worldwide" (2004, p. 39).

Ironically, the parade was known to be fake when it was first published — the book that printed the parade, after noting only that "fragmentary fossil evidence" exists for human evolution, openly admitted that the parade was largely manufactured evidence. In the author's words, "Many of the figures shown here have been built up" from a few fragments, "a jaw, some teeth perhaps...and thus are products of educated guessing' (Howell, 1970, p. 41). The author added that "even if later finds should dictate changes," i.e., even if the drawings are wrong, "these reconstructions serve a purpose in showing how these creatures might have looked" (the term *might* is in the original).

AZERAJOPTINECIS ALBIROLOGIFICICIS HOPO ENCIUS NEARGERIAL CED-MACHON MODERN MAN

July / August 2008

The parade pictures are also misleading, even according to Orthodox Darwinism, because they imply a single evolutionary line to humans in contrast to the dominant view, which is that human evolution is actually a branching bush. Below each of the 15 illustrations was a discussion of each picture — something that is rarely ever done today when the parade is shown. Usually the parade today starts with a picture that looks like *dryopithecus*, adding *A. robustus*,

Homo erectus, Neanderthal man, Cro-Ma-

gnon man, and modern man.

Lubenow stresses it is "not that more recent fossil discoveries have revealed that the parade was inaccurate. No, the truth is far worse" (2004, p. 40). A few of the "far worse" examples include the fact that the proto-apes pictured were not bipedal, yet are shown in the illustrations as being expertly bipedal. The bipedal apes shown in the parade were believed to have lived long before bipedalism is said to have evolved. The text openly admits this, stating, "although proto-apes and apes were quadripedal, all are shown here *standing* for purposes of comparison" (Howell, 1970, p. 41; emphasis added).

This admission is actually only partly accurate. Some of the creatures shown in the parade were *physically unable* to stand erect. Furthermore, although the text describes them simply as "standing," they are actually drawn *walking* across the page, some of them having one foot in the air, balancing on the other foot as they strode across the page. This gives them a far more human-like appearance than if they were just standing. Accurate comparisons require

### by Paul G. Humber

itler's "Bible" actually scorns the book most people think of when the word Bible is mentioned, for in Hitler's "Bible" we read these words: "we have long discarded the Adamic theory that man is descended from a single pair, created a few thousand years ago in a mythical Garden of Eden somewhere in Asia, to spread later over the earth in successive waves."

The real Holy Bible also contrasts with Hitler's "Bible" on the sanctity of human life. The true Bible forbids murder and upholds the sanctity of human life, but this is not so in Hitler's "Bible":

Mistaken regard for what are believed to be divine laws and

... continued on p. 4

... continued on p. 2

# Evolution Parade ...continued from page 1

showing their actual normal quadripedal gate.

Another problem is that the relative sizes of the illustrations are distorted, showing the *first* link as a very small animal, and each progressive link, with only two exceptions, Dryopithecus and Solo Man, larger and taller as they progressively stand up straighter as the panorama progresses. The figures become taller, not because of fossil or other empirical data, but as a result of artist license. They also become progressively less hairy, which is also clearly a result of artistic license and not fact. No evidence exists to determine the amount of body hair for most, if not all, of the fossils except modern humans. They were clothed with both flesh and hair by the artist.

Furthermore, the text openly admits that the first link, *Pliopithecus*, was not even considered to be an evolutionary link to humans in 1965 when the book was first published, but rather "is now classed as an ancestor of the Gibbon line" (Howell, 1970, p. 41). At the second step, *Proconsul*, even though it had been drawn to look very human, the caption admits that "proconsul is considered to be a very early ape, the ancestor of the chimpanzee and perhaps of the gorilla" (Howell, 1970, p. 41).

For *Dryopithecus* the text admits that the entire animal, although also made to appear very human-like but stooped, is known only from "a few jaws and teeth" (p. 42). The fourth step, *Oreopithecus*, the text states, is a "likely side branch on man's family tree" (p. 42) and not our evolutionary ancestor. The text also notes that the next picture, Ramapithecus, is "now thought by some experts to be the oldest of man's ancestors in a direct line" (p. 42). To conform to the orthodox view of human evolution, the progression should begin with Ramapithecus. The next ape men in line that are admitted as problematic are A. Robustus, which "represents an evolutionary dead end in man's ancestry" (p. 43), and Solo Man, known only by "two shin bones and some fragments of skull" (p. 44). Also of note is the fact that from A. Africanus to modern man, the bodies are remarkably similar. Only the heads, most of which look like they do not belong on the body shown in the picture, are different.

Although the text does openly point out the many inaccuracies in the drawings, Lubenow comments that perhaps less than five percent of those who owned the book actually read it in its entirety. Conversely, many casual readers of the book no doubt noticed the parade but did not read the fine print below the large pictures that explained the major problems with the illustrations. Thus, the visual image of the parade has effectively "sold the concept of human evolution even though the book revealed that the parade was fictitious" (2004, p. 40).

The parade achieved even more publicity in a *National Geographic* magazine special in November of 1985 (Weaver, 1985).

On pages 574 to 577, it shows the now familiar progression in a realistic set of well-done paintings. In some ways, though, this illustration is even less accurate. Beginning with A. afarensis the figures are not walking as they were in the Time-Life book, but are shown as expert runners progressively running faster and with more grace and arm swinging as the parade progresses. The bodies of the figures are all very human only the heads differ significantly. The first head in the progression is very apelike, and the last head is a very handsome, tanned Caucasian. The major differences in the bodies are that the arms are comparatively shorter, and that the body is progressively less hairy as the progression to modern humans continues. The descriptions gave no hint of the controversy about the fossils the illustrations are designed to demonstrate. The text does admit that the artist "speculated on skin tone and the amount of body hair and its texture" and that the relationships of the fossils are "still not fully understood" (Weaver, 1985, p. 574).

The parade implies that evolution from our putative ape-like ancestor, that looks much like a chimp called *Pliopithecus*, to modern humans was very straightforward, showing hereditary changes progressively moving forward along a single ancestral line. As shown graphically by Burenhult (2003, pp. 53-54), even if human evolution is true, and a parade progression actually occurred, so much controversy exists about it that a single diagram is greatly misleading. Burenhult shows four different models, including those developed by some of the most prominent modern paleontologists, such as Donald Johanson, Tim White, Richard Leakey, Collin Groves, and Bernard Wood. Each of these family trees is drasti-

### **Contents**

The Human Evolution Parade: The Most Famous lo of Evolution Is Fraudulent	
Hitler's "Bible"	1
"I'm a Christian and I Believe in Evolution!"	3
without excuse! The Testimony of the Medicine Cabinet	5
The Personification of Evolutionism	6
Speaking of Science Sweet Solutions from Nature. Complex Ankle Puts Bounce in Your Step Moths Navigate in the Dark Against the Wind Feather Fossil Fallacy? Does Cancer Illustrate Fitness?. Defeat Spam: Imitate the Body's Defenses Can Worms Outsmart Humans? Dog Does Calculus	7 8 9
All by Design: Eye of Perfection	10

### **Creation Matters**

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cally different and, in contrast to the visual parade illustration, shows several offshoots or side branches. Fortunately, the "new view" refuting the parade is now being presented in some mass media publications. A Newsweek article pictured the parade as the "old view" and, next to it, showed the "new view," a complex bush that is very different from the now-famous parade (Begley, 2007, p. 56).

In recent years the parade itself has evolved. A common version now is to show the first step involving a fish in water, then a fish crawling out with small legs, next a four-legged animal and, last, a set of primates similar to the old parade leading to humans. The best example may be seen in the Cosmos series narrated by Carl Sagan (Druyan, 1980). This expanded parade also

suffers from the same faulty simplification and "adjustment" as the original ape parade.

As Lubenow summarizes, the parade is "raw propaganda — brilliant propaganda, but raw nonetheless. Yet no evolutionist has protested this gross lack of scientific objectivity" shown in the Time-Life book (2004, p. 40). Sadly, this "outrageous...raw propaganda" has influenced millions of persons to accept the Darwinian worldview of human evolution.

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# "I'm a Christian and I Believe in Evolution!"

by David A. Kaufmann, Ph.D.

ometimes when I lecture or debate the creation vs. evolution controversy, or when talking with members of my congregation or guests, some person will exclaim: "Well, I'm a Christian and I believe in evolution." I call this the "I'm a Christian, Too, Proof" of evolution. What these people are actually saying is that they find no logical contradiction between believing, simultaneously, the two diametrically opposed doctrines of creation and evolution.

This also smacks of "argument by arrogance"; i.e., "since I believe it, it must be true!" Even if a person believes in macroevolution, this is not an argument for the validity of macroevolution. Macroevolution must stand or fall based on how much the evidence correlates with the predictions of the macroevolutionary model of origins, and not on who does or does not believe in it

To be true, a doctrine must in all parts and points agree with the Word of God. "Thy Word is truth" (John 17:17). "If you continue in my Word .... Ye shall know the truth" (John 8: 31, 32). If we are mature in our faith, we would willingly follow the words of the "greatest teacher of all," "teaching them to observe all things whatsoever I have commanded you" (Matt. 28:20).

So the statement referenced in the title of this article doesn't tell us much about the truth of macroevolution or its logical compatibility with the doctrine of creation. It does tell us something about the maturity 1990, p. 23). However, the killer quote or immaturity of the person's faith and his comes from Dr. G. Richard Bozarth: or her willingness to be illogical. People who claim to be Christian and claim to believe in macroevolution are making a gross violation of the Law of Non Contradiction, which states, in its simplest form, that "A cannot be non-A at the same time and in the same sense."

For example, in economics one cannot believe in both communism (state control) and free enterprise (individual control) of goods and commerce at the same time. Either the state controls the flow of capital or the individual controls the capital flow. not both at the same time. Likewise, one cannot claim to be a vegetarian and eat bacon cheeseburgers! Most people who claim to be theistic evolutionists do not realize how illogical they are. Worse yet, they do not realize how immature their faith

The doctrine of macroevolution literally obliterates basic Christian teachings. The following quotes from champion macroevolutionists demonstrate this. Dr. William Provine, Professor of History and Biology at Cornell University stated: "If natural selection explained adaptation, and evolution by descent were true, then the argument from design was dead and all that went with it, namely: 1) the existence of a personal God, 2) free will, 3) life after death, 4) immutable moral laws, and 5) ultimately the meaning of life" (First Things, October,

Christianity is — must be! — totally committed to the special creation as described in Genesis, and Christianity must fight with its full might, fair or foul, against the theory of evolution. It becomes clear now that the whole justification of Jesus' life and death is predicated on the existence of Adam and the forbidden fruit he and Eve ate. Without the original sin, who needs to be redeemed? Without Adam's fall into a life of constant sin terminated by death, what purpose is there to Christianity? None.

Christianity has fought, still fights, and will fight science to the desperate end over evolution, because evolution destroys utterly and finally the very reason Jesus' earthly life was supposedly made necessary. Destroy Adam and Eve and the original sin, and in the rubble you will find the sorry remains of the son of god. Take away the meaning of his death. If Jesus was not the redeemer who died for our sins, and this is what evolution means, then Christianity is nothing! ("The Meaning of Evolution," American Atheist (February 1978), pp. 19, 30)

This open and honest cheerleader for macroevolution clearly demonstrates that the Gospel proclamation is absolutely dependent on an accurate and historical understanding of the Genesis creation account. Theistic evolution is actually "theo-illogical." It states that theological A's can be

equal to naturalistic non-A's.

The very nature of macroevolution undermines the authority and basic beliefs of biblical Christianity, because macroevolution philosophically maintains that matter and physicochemical laws have creative powers, so there is no need to believe in the clear statements of Scripture. Theistic evolution is actually a belief system of "conceptual contradictions." Logical and mature Christian faith and macroeveolution are not only mutually exclusive, but they

are philosophically and theologically antithetic. They oppose and negate each other.

So people who proclaim "I'm a Christian and I believe in evolution" are not telling us anything about the truth of macroevolution, but are telling us something about the immaturity of their faith and their foolish violation of the laws of logic! Scientists, pastors, teachers, and lay leaders have a Herculean job of trying to correct these people and improve their walk with the true teachings of biblical Christianity.

The recommended way to approach them is to explain the incompatibilities between the naturalistic philosophy of evolution and biblical faith. Hopefully, they will come around to announcing, "I'm a Christian and I believe in the biblical doctrine of creation!"

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# Hitler's "Bible"

a sentimental belief in the sanctity of human life, tend to prevent both the elimination of defective infants and the sterilization of such adults as are themselves of no value to the community. The laws of nature require the obliteration of the unfit, and human life is valuable only when it is of use to the community or race.<sup>2</sup>

The author of Hitler's "Bible" was born in New York City, graduated from Yale University, and received a degree from Columbia Law School. Who was this author of Hitler's "Bible"? He was a mere mortal whose spirit left his body in 1937, at the age of 71. His name? Madison Grant. The book? *The Passing of the Great Race*.

I first learned about this book at Le Bus Restaurant, in the Manayunk Section of Philadelphia, for I was having lunch with Tony Campolo, who had written a good article, "The real danger in Darwin is not evolution, but racism," published by *The Philadelphia Inquirer* some months prior.<sup>3</sup> The article describes Tony as "professor emeritus of sociology at Eastern University and served as pastoral counselor to former President Clinton."<sup>4</sup>

Tony's hand-written note to me, providing the book's title and author, was new information for me. Subsequently, I got a copy of the book, but how, some might wonder, did I learn it was Hitler's "Bible"?

Wikipedia lists Jonathan P. Spiro's book, *Patrician racist: The Evolution of Madison Grant*, as a reference for the Grant entry,<sup>5</sup> and I sent a message of inquiry to this professor of history at Castleton State College in Vermont: "Are you of the opinion that the letter Hitler wrote to Grant has been destroyed? Do you know anything else that was in that letter, other than the one sen-

tence?" (The one sentence I was referring to was as follows: "The book is my Bible.")

Dr. Spiro replied promptly,<sup>6</sup> writing that the letter had been destroyed. Lest someone might think he would not be in a position to know, one person wrote of this author:

...there is no denying that Spiro is a first-class researcher. A true archival athlete, Spiro consulted no fewer than 112 archive collections, and his bibliography fills thirty-two closely spaced pages. He needed to cast a wide net because Grant is not an easy biographical subject. He wrote no memoirs and his family destroyed his personal papers after his death. Much of his correspondence to colleagues has also been destroyed or gone missing.<sup>7</sup>

I also sent a note to Dr. Richard Weikart, faculty member of the Department of History, California State University, Stanislaus, and author of *From Darwin to Hitler: Evolutionary Ethics, Eugenics, and Racism in Germany*: "I assume you are aware that Hitler viewed Madison Grant's book, *The Passing of the Great Race*, as his Bible. ... Do you know where the letter is located?"

He responded: "I do not know where Hitler's letter to Grant is, but I knew about it from Stefan Kuehl's book, *The Nazi Connection: Eugenics, American Racism, and German National Socialism.* He cites Leon Whitney's unpublished memoir as the source of this information. Grant apparently showed Whitney the letter."

Though methods were different, Hitler undoubtedly picked up on Grant's word, "elimination," from this false "Bible":

Those who read these pages will feel that there is little hope for humanity, but the remedy has been found, and can be quickly and mercifully ap-

plied. A rigid system of selection through the elimination of those who are weak or unfit — in other words, social failures — would solve the whole question in one hundred years, as well as enable us to get rid of the undesirables who crowd our jails, hospitals, and insane asylums. The individual himself can be nourished. educated, and protected by the community during his lifetime, but the state through sterilization must see to it that his line stops with him, or else future generations will be cursed with an ever increasing load of victims of misguided sentimentalism. This is a practical, merciful, and inevitable solution of the whole problem, and can be applied to an ever widening circle of social discards, beginning always with the criminal, the diseased, and the insane, and extending gradually to types which may be called weaklings rather than defectives, and perhaps ultimately to worthless race types.8

Hitler also believed in "worthless race types." In 1987, an article, "The Ascent of Racism," documented Hitler's fanatical, evolutionary racism. Blame was placed at the feet of an Englishman, Charles Darwin, in that article. I did not realize at the time, however, that one of two Americans I referred to in the article actually wrote the Preface to Grant's book. In fact, I was unaware of Hitler's "Bible." Nor was I aware of the influence it had had apparently on Hitler himself. Many of Hitler's notions are seen in Grant's book, and it was "the first non-German book ordered to be reprinted by the Nazis when they took power." 22

I wonder if members of Grant's family, who discarded his papers, also wish they could have destroyed all copies of his "Bible" as well. Yes, America contributed much to the defeat of Hitler in World War II, but it did so with impure hands. In some measure, America, like England, as the real

Bible says, was reaping what it had sown<sup>11</sup>
— through the publications of such men as
Charles Darwin and Madison Grant.

Grant and Hitler have now left this earth. The latter was disgraced; the former, mostly forgotten. Darwin's book, however, worshipped by many present-day, 21st Century elite, still energizes some to scorn the Word of God and to see people as mere accidents in the universe.

Men are not accidents, however, and they are worth redeeming. The Creator, who conquered death (unlike Hitler and Grant), is also the Redeemer of those who, with humble hearts, fall in love with Him and trust Him for salvation. Creator Christ, Jehovah Jesus, is worthy of all this and much, much more! May His Name be praised!

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<sup>1</sup> Grant, M. 1921 The Passing of the Great Race.

Scribner's Sons, New York, p. 13.

- <sup>2</sup> Grant, p. 49.
- <sup>3</sup> The lunch took place on July 14, 2008. Ted Siek Ph.D. was also present.
- <sup>4</sup> Campolo, T. 2008. The real danger in Darwin is not evolution, but racism. *The Philadelphia Inquirer*, 20 January.
- <sup>5</sup> Anonymous. 2008. Madison Grant. Wikipedia (accessed 3 August 2008). http://en.wikipedia.org/wiki/Madison Grant
- <sup>6</sup> Personal email sent to author on July 21, 2008.
- <sup>7</sup> Anonymous. 2008. Madison Grant biography due out later this year. race/history/evolution notes (accessed 3 August 2008). http://racehist.blogspot.com/2008/05/madisongrant-biography-due-out-later.html
- <sup>8</sup> Grant, pp. 50-51.
- <sup>9</sup> Humber, P.G. n.d. *The Ascent of Racism*. Institute for Creation Research (accessed 3 August 2008). www.icr.org/article/268/
- Henry Fairfield Osborn was a professor of biology and zoology at Columbia University. For twenty-five years (1908-1933), he was President of the American Museum of Natural History's

- Board of Trustees. He made the stupid and repugnant statement: "The standard of intelligence of the average adult Negro is similar to that of the eleven-year-old-youth of the species *Homo Sapiens.*"
- <sup>11</sup> Galatians 6:7 "Do not be deceived: God cannot be mocked. A man reaps what he sows." See also Hosea 8:7.

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# ...without excuse!

by Timothy R. Stout

Editor's note: This is the first in a series of short articles under the theme "..without excuse!" Mr. Tim Stout, whose ministry reaches college and university students, takes the position that God has placed the evidence of His person in an open and obvious manner into the creation. According to Tim: "It is each person's responsibility to see it and follow through on it. God considers the evidence in nature to be sufficient, and that is all that matters. He is not interested in their excuses. He is interested in their faith and obedience. My task is to try to show things that I believe could be representative of the things He expects a person to understand from nature that reveal His person."

was on the campus of The Ohio State University, passing out free literature on creation science to students as we crossed paths. Most of the students were friendly and gracious in their acceptance or declination of the offer. However, one particular student started laughing and then looked at me as if I had green hair and purple skin. As he turned to walk away, I politely said to him, "Excuse me, why are you laughing? You do not even know what my arguments are." He stopped and said, "Okay, you have thirty seconds."

I asked him how long it took from the time random chemicals started combining until the first cell was fully functional. He said, "Probably about ten to 100 million years." I then asked him, "Have you ever

The Testimony of the Medicine Cabinet



noticed how every medicine in your medicine cabinet has an expiration date?" He said, "Yes." I then asked him how far into the future a typical expiration might be. He answered about two to ten years. I then commented on how packaged foods, herbs, and medicines all have expiration dates, generally well under ten years. The reason for this is simple. Biological compounds spontaneously decay extremely rapidly. Because of this decay, it is not safe to use them after a relatively short period of time.

Then I dropped the bomb: "If biological compounds have significant decay in less than ten years, then even if a useful one did happen to accidentally form, how could it stick around for over a million years waiting for the first cell to form? *Biological* 

compounds decay faster than random processes can form them.

He looked dumbfounded and didn't know how to answer. I told him the offered literature discussed these kinds of things. So, he changed his mind, took a pamphlet, and went on his way. May the Holy Spirit prod him to read it and open his heart to the truth.

Since that time, I have used the medicine cabinet illustration as an attempt to gain interest on many occasions. About one-third to one-half of the students change their minds after hearing this simple argument. They seem genuinely shocked at the obvious contradiction between the lengthy time spans assumed in the classroom and the short periods of time on every one of the medicines, vitamins, herbs, etc. that they personally own.

In Romans 1:20, we read, "For since the creation of the world His invisible attributes are clearly seen, being understood by the things that are made, even His eternal power and Godhead, so that they are without excuse..." Even a medicine cabinet bears testimony of a living God whose creative work is the source of life.

## The Personification of Evolutionism

by Jerry Bergman, Ph.D.

volution is commonly spoken of as a person or an entity with human traits such as intelligence, creativity, and even tinkering. For example, Ackerman wrote that: "evolution tinkered with creatures immune to oxygen" (2004, p. 252). J. Scott Turner (2007) wrote a whole book about evolution as a tinker and its accomplice, homeostasis, which as a pair "eloquently and convincingly" produces design. Bentley (1999) wrote that evolution is both a "creator" and a "designer." Evolution also is involved in "experimenting" and finds certain experiments "very useful" (Man, 1978, p. 56). Iida (2005, p. 22, emphasis added) concluded that

"Evolution has been *hard at work creating* the myriad forms of life that lived and died on our world for hundreds of millions of years. In that unimaginably vast amount of time, *designs* of life wholly beyond our current comprehension have emerged ... The *ability* of natural evolution far surpasses our most creative *problem solvers*."

Frequent use of the terms "hard at work," "creating," "design ability," and expressions such as "problems to be solved" forced lida to remind readers that "Evolution is not a person."

Other scientists inform us that evolution uses a "strategy" in order to find a "solution" to some problem (Fernald, 2001 p. 4). In doing this, evolution has "preserved" things but has also made "quantum leap[s]" where necessary to produce new "creative designs" (Walters, 1997, p. 15). Evolution has also "found a solution" to produce "correct outputs" (Sekanina, 2005, p. 3). It even is able to "recruit" things, such as "different suites of genes" in order to "solve problems" (Fernald, 2004 p. 142). "Evolutionary solutions" to problems in the past include "recruiting existing gene programs" for new functions (Fernald, 2004 pp. 142, 146). Other human qualities of evolution include its being ingenious and crafty, and it has even managed to have "found a solution" to the problems faced when insects flew into new environments (Iida, 2005, p. 36).

#### The word "Nature"

A synonym for "evolution" is the word "nature," a term that is likewise commonly personified. Expressions such as "nature has created" or "nature has evolved" are common in the scientific and popular literature alike (Walters, 1997, p. 20). An example (Sinclair, 1985, p. xvii) is:

Nature has frequently solved engineering problems that still confound our limited brains. The human eye is nothing more than jelly and sinew, yet its ability to detect contrast far exceeds that of the most sophisticated camera.

If the word nature, or even the term evolution, were replaced with the word "God" or the words "our creator," the sentence would make perfect sense in most cases. A Google study of the word "nature" or "evolution" and other terms found the following results: Evolution is "creative" — 31,300,000 sites; "ingenious" — 1,340,000 sites; "intelligent" — 24,100,000 sites; a "designer" — 11,900,000 sites; and "solves problems" — 2,450,000 sites. While many of these sites used these words in different contexts, a large number of the articles did in fact use these terms to personify biological evolution.

As is also true of people, evolution does not always behave properly. It can "create problems" just humans do (Walters, 1997, p. 8). Nonetheless, evolution is a "relentlessly efficient engineer" and its ingenious design creates a "piece of evolutionary wisdom," such as smell, which is an example of "nature's marvel of engineering" (Walters, 1997, pp. 3, 11, 13). Hart (2006, p. 22) wrote that, unless one believes

that evolution in humans has reached its ultimate conclusion, the fact that we are not more intelligent than at present does not mean that there is no evolutionary advantage in being more intelligent or that evolution could not boost our capacities in the same way that certain drugs or technology may be able to.

University of California evolutionary biologist Michael Rose has concluded that children take many risks rough-housing, and to protect them, "evolution has equipped children with parents — who are slower but wiser" (Hamilton, 2006). The book titled *Moral Minds: How Nature Designed Our Universal Sense of Right and Wrong* explained how evolution designed our universal moral sense of right and wrong (Hauser, 2006). There seems to be no limit to the talents and abilities of evolution!

#### Conclusions

Evolution is spoken of as being a designer hard at work using strategies to find creative solutions to solve problems, such as recruiting genes to deal with some concern, as well as tinkering to solve problems. Evolution also has "foresight" and, for this reason cells evolve "more elaborate ... mechanisms" to deal with future problems (Walters, 1997, p. 20). Walters wrote that evolution even has "developed a variety of elaborate signaling systems to maximize the efficiency" of cellular functions (1997, p. 4).

Only intelligent persons can accomplish what evolution purportedly has achieved and, for this reason, many writers find it necessary to personify Darwinism in order to explain the amazingly complex and ingenious feats that they believe evolution has accomplished. One Cambridge Ph.D. even referred to evolution as our "mother" and time as our "father," stating that "mother evolution and father time" have "conspired to create a language of different growth factors" (Walters, 1997, p. 16).

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# Speaking of Science

Commentaries on recent news from science

Editor's note: All 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.

#### **Sweet Solutions from Nature**

H uman engineers continue to look at plants and animals for inspiration. Biomimetics — the imitation of biology for design technology — shows no sign of running out of ideas.

- 1. <u>Sweet gas</u>: A spoonful of sugar in the gas tank? *ScienceDaily* reported on progress in converting plant sugars into clean-burning hydrogen using biological enzymes.<sup>1</sup> This could give a new meaning to "power plant."
- 2. <u>Moooove on</u>: Speaking of enzymes, fuel technicians have isolated an enzyme in a cow's stomach that shows promise for efficient conversion of plant sugars into ethanol.<sup>2</sup> *ScienceDaily*'s gut reaction to this story was positive: "The fact that we can take a gene that makes an enzyme in the stomach of a cow and put it into a plant cell means that we can convert what was junk before into biofuel," said one professor of crop and soil science.
- 3. <u>See ya sooner, alligator</u>: Yuck: alligator blood. What good could come from that? Infection-fighting drugs, reported *National Geographic News*.<sup>3</sup> Scientists are intrigued that alligators live with frequent bloody wounds in bacteria-laden muddy swamps but rarely get infected. Scientists at Louisiana University found that alligator serum fights more bacteria than human serum. If we can harness the alligator's secrets, said one researcher, "we could be on the verge of a major advance in medical science."
- 4. <u>Drag queen</u>: The dragline silk of spiders continues to be a holy grail for materials scientists. A German physics team reported in *PNAS* some initial success in getting the proteins to assemble into fibers.<sup>4</sup> To do it, they squeezed the proteins through tiny orifices similar to the spinnerets on a spider's abdomen. The *BBC News* published a report about it.<sup>5</sup> Spiderman, here we come.

In the alligator story, National Geographic noted that alligators have "innate" immune systems while humans have "adaptive" immune systems. "Although innate immunity is often considered primitive, there is nothing primitive about its effectiveness, [Adam] Britton [biologist, northern Australia] said." Britton called the antimicrobial peptides in alligator serum "extremely effective agents" against bacteria. Remember that the first extremely effective antibiotics were also found in a "primitive" organism — fungus. Design follows design, not chaos. Imitation is the highest form of flattery.

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### Complex Ankle Puts Bounce in Your Step

he ankle is incredibly efficient at working so the amount of energy you burn with the ankle is much lower than what would be predicted with just isolated muscle studies." That's what kinesiologist Daniel Ferris (U of Michigan) said in an article on *ScienceDaily*. His team measured the efficiency of the muscles and tendons of the ankle by designing a prosthetic boot containing a "bionic ankle," connected to the nervous system with electrodes

The Achilles tendon is able to store and release energy at just the right rates for both walking and sprinting. Scientists have helped amputees with prosthetic devices that can work for one or the other, but only the real ankle is optimized for both. During walking, the article said, the muscle and tendon act like a catapult to put a spring in your step — delivering about three times the energy that could be stored in an isolated muscle.

Does anyone see Darwin in this picture? The article had no use for that hypothesis. These scientists approached the human foot and ankle *as if it were engineered*, and advanced science accordingly. Ferris is in a Department of Biomedical Engineering. How would one even begin an evolutionary study of the human foot? How many lucky mutations would it take to get this "incredibly efficient" system by accident? Don't expect adding a few more millions of years into the mix to help.

Most of the real footwork in science is done with a presumption of intelligent design. When mentioned at all, evolution is merely an afterthought in such studies. The scientists might say something like, "Isn't it amazing what evolution produced." Bosh; this was a design study from start to finish. Give credit where it is due. Intelligent Design promises much more productive knowledge and discovery than evolutionary theory ever did. Junk the just-so stories and let's race to understand design in nature, because it's not just apparent, it's real.

 University of Michigan. 2008. The spring in your step is more than just a good mood. *ScienceDaily* (24 April). www.sciencedaily.com/releases/2008/04/080423171516.htm

# Moths Navigate in the Dark Against the Wind

A moth weighs little more than a piece of paper, but it does things no paper blowing in the wind can do: it can navigate with and against the wind to get where it needs to go.

ScienceDaily reported on work by UK

little insects go in the dark of night.1 Their subjects were silver moths that migrate high in the air for hundreds of kilometers to their breeding grounds. These moths, they found, "rely on sophisticated behaviors to control their flight direction, and to speed their long-distance journeys into areas suitable for the next generation of moths." The work was published in Current Biology.<sup>2</sup>

The scientists were not overly surprised that the moths take off on the most favorable days, and use the wind to their advantage. What was most unexpected was that the moths are not at the mercy of the winds. The article states, "the moths compensate when the wind direction is substantially off target."

This ability, called compensation for wind drift, had been seen in low-flying insects like butterflies. For moths to do this high in the air in the darkness of night means "the moths must have a compass mechanism," similar to that found in migrating birds. Though the research was limited to this one species, they suggested "that these mechanisms might prove to be widespread among large windborne insect migrants."

The scientists calculated that the silver moths they studied were able to travel 300 km per night — achieving speeds of 30 km per hour. How they accomplish this feat is not clear. Did they explain how evolution produced flight navigation in insects independently of birds? No; they just assumed it: "Taken together, our results show that nocturnal migratory moths have evolved a suite of behaviors to facilitate successful migrations to temporary breeding and overwintering areas."

At the end of the press release, they tagged on a line about global warming. The scientists should have focused, instead, on the remarkable evidence for design. Can you imagine a featherweight machine that knows how to sail in the air? We won't even bother thinking about how similar wonders could have evolved separately in birds and insects, which are nowhere near each other on Darwin's tree of lie.

Assignment: Make a list of the items of hardware and software you would have to add to a 2-inch scrap of paper blowing in the wind to make it be able to arrive at a precise point 300 km away. Extra credit: Add to your list how many more items of hardware and software you would have to build onto the paper for it to reproduce itself with copies that could fly back home, having never been there before. Notice that this implies a requirement: the hardware needs to be lightweight enough to make your scrap of paper not plummet to the ground.

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## Feather Fossil Fallacy?

T mprints of melanocytes have been found in fossil ▲ feathers. What does this mean? The popular science news reports, like Science Daily,1 LiveScience,2 PhysOrg,<sup>3</sup> and the BBC News<sup>4</sup> seem convinced this finding can tell us something about how birds evolved from dinosaurs. Understanding what was actually discovered requires sifting through claims that go far beyond the evidence.

The Claims: "The complex coloured plumage of extinct

scientists who used "entomological radar" to monitor where the birds which once soared over the heads of dinosaurs could soon be revealed." (BBC) "Artists may now be able to paint dinosaurs and ancient birds and mammals in their true colors, thanks to the discovery of pigment residues in fossilized feathers." (LiveScience) "The traces of organic material found in fossil feathers are remnants of pigments that once gave birds their color, according to Yale scientists whose paper in Biology Letters opens up the potential to depict the original coloration of fossilized birds and their ancestors, the dinosaurs." (ScienceDaily) Another Yale scientist remarked, "Now that we have demonstrated that melanin can be preserved in fossils, scientists have a way to reliably predict, for example, the original colors of **feathered dinosaurs**." (LiveScience)

> What Was Found: The Yale scientists determined that some imprints of carbon in the rock were not bacterial residues but traces of melanocytes — the cells that contain the pigment melanin. The protein melanin was thought to degrade quickly, but carbon imprints of melanin were still identifiable in color bands within the specimens. These were detected in a fossil of a striped feather from Brazil (which evolutionists claim is 100 million years old), and in a fossil of an Eocene bird from Denmark (claimed to be 55 million years old). Both specimens were from birds. No dinosaur feathers were found.

> In other words, more imaginary feathers have been found, but this time on imaginary dinosaurs. The question no one seems to be asking is, how could these delicate protein structures survive for over 100 million years? One of the co-authors of the *Biology* Letters paper simply stated that the fact they exist proves that they are that old. Jakob Vinther stated flatly, "Understanding these organic remains in fossil feathers also demonstrates that melanin can resist decay for millions of years."

> Only the BBC News came close to questioning the claim. Co-author Mike Benton was quoted asking, "But then how do you square that with the well-known fact that the majority of organic molecules decay in thousands of years?" His answer was vague: "Somehow [the melanosomes] are retained and replaced during the preservation process and hence you preserve a very life-like representation of the colour banding."

> In the end, no one questioned the age of the fossils. "The Yale team believe [sic] it could identify brown, red, buff and even iridescent colours," the BBC reported. "The technique may be applied to other creatures to reveal the colour of fur or even eyes, the team believes." Benton did offer one more clue that the result was astonishing: "It might give you a very clear handle on an aspect of the ecology that people would have thought impossible to divine for an ancient fossil," he said.

> The observation-to-assumption ratio in this story was so low, that if it were a signal-to-noise ratio, you would hear mostly static. Ask yourself a simple question. Up till now, scientists respected the "well-known fact" that organic molecules decay in mere thousands of years. Doesn't the presence of organic molecules in fossils suggest the slight possibility that the scientists are flat wrong about their dating, and that the fossils are indeed mere thousands of years old?

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#### **Does Cancer Illustrate Fitness?**

M ost people think of health and vitality when they hear the word "fitness." Why, then, does an article on *ScienceDaily* apply the word to one of the biggest scourges of mankind?

Scientists from The Institute of Advanced Studies at Princeton and the University of California discovered that the underlying process in tumor formation is the same as for life itself—evolution.

The article even applies Spencer's notorious phrase to the evolution of cancer: "Survival Of The Fittest: Even Cancer Cells Follow The Laws Of Evolution." It continues,

After analyzing a half million gene mutations, the researchers found that although different gene mutations control different cancer pathways, each pathway was controlled by only one set of gene mutations.

This suggests that a molecular "survival of the fittest" scenario plays out in every living creature as gene mutations strive for ultimate survival through cancerous tumors.

Gerald Weismann, Editor-in-Chief of the *The FASEB Journal*, where the original research was published,<sup>2</sup> commented,

Little could Darwin have known that his 'Origin of the Species' would one day explain the 'Origin of the Tumor.' 1

Good grief — cancer is not fitness. Evolutionists (at least those who think consistently) have to believe that everything destructive is just as worthy of our respect and admiration as everything good and beautiful, because it is just another manifestation of the mindless, senseless, directionless, purposeless "laws of evolution" (which are not laws at all in the classical scientific sense: where are the equations?).

So while millions of their fellow humans are suffering from cancer, looking to science for treatments and cures, there are a few researchers who, calling themselves fellows of the "institute of advanced studies," seem to have paraphrased the title of Darwin's famous book: On the Origin of Tumors by Natural Selection, and the Preservation of Favored Mistakes in the Struggle for Death.

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**Defeat Spam: Imitate the Body's Defenses** 

Y our body's immune system is inspiring the next generation of email spam-fighters. The University of Southampton reported that "An algorithm for spam recognition inspired by the immune system will be presented at the first European conference on Artificial Life (ALIFE XI) being held in Winchester this week."

The idea is that "in the same way as the vertebrate adaptive immune system learns to distinguish harmless from harmful substances, these principles can be applied to spam detection." The conference is hosted by the University's new "Science and Engineering of Natural Systems" group.

Natural systems do not do their own science and engineering. The engineering is embedded in their DNA. The conference attendees will hear from experts on alleged self-organizing structures and "embedded, embodied, evolving and adaptive systems." This is code for intelligent design. Embedded instructions require design. Embodied adaptive systems require pre-programmed design by intelligent agents (as in robotics). Evolving systems that perform such feats without intelligent help, however, exist only in the vivid imaginations of secular evolutionists. Their best example so far is a tornado in a junkyard.

 Lewis, J. 2008. ALIFE Conference to reveal bio-inspired spam detection. *University of Southampton News* (4 August). www.ecs.soton.ac.uk/about/news/1968

#### **Can Worms Outsmart Humans?**

orms may seem creepy to some people, but they possess some amazing abilities. How many of you had to struggle through calculus class, for instance? Worms know it by heart, reported *LiveScience*. Their brains instinctively apply the logic of calculus to signals from sensory inputs. A University of Oregon biologist found that when a roundworm is

sensing the presence of food, it essentially takes a derivative to arrive via the shortest possible path.

In other worm news, engineers may have found a source for "super-strong, lightweight materials for use as construction and repair materials for spacecraft, airplanes, and other applications." It's in the fang-like jaws of a common marine worm, reported *ScienceDaily*.<sup>2</sup> A unique histidine-rich protein identified in the jaw and pincers of this worm "rivals that of human teeth and exceeds the hardness of many synthetic plastics," yet is as lightweight as it is strong. *Nereis virens* (sandworm or ragworm; see description³), a marine worm prized as bait by Maine fishermen, uses the jaws to capture and cut up its food.

Maybe dogs learned calculus from worms (see next article). If an evolutionist tries to call this a case of convergent evolution, debate him.

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### **Dog Does Calculus**

Throw a ball into a lake, and a dog will find the optimal path to fetch it. Tim Pennings at Hope College.

Michigan took his dog Elvis and was amazed at how the dog figured out the optimal route to the hall — a common problem students.

route to the ball — a common problem students in calculus classes have to solve. The story is on *Newswise*.<sup>1</sup>

Pennings is not saying Elvis understands calculus, but that this was "an example of the uncanny way in which nature often finds optimal solutions." Nature does not find optimal solutions. Nature is not a person.

If the intelligence were not put in from the outside by Someone, nature would follow the laws of thermodynamics, and the dog would decay into dust on the shore of the lake. That Elvis does not, and happily jumps into the water, swimming straight to the ball in spite of the current, is a tribute to the Designer who made cells, DNA, brains, muscles, nerves, and complex interconnected systems that make such tricks possible in a world that, of itself, gravitates toward equilibrium.

 Anonymous, 2003. Do dogs know calculus? NewsWise (20 May). www.newswise.com/articles/view/?id=DOGMATH.DJC

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# All by Design

by Jonathan C. O'Quinn, D.P.M., M.S.

hether discussing enzyme-catalyzed biochemical reactions, reproduction strategies, or physical specializations of living things, the biological systems upon which life depends are all-or-nothing systems, either functioning perfectly from day one and allowing life, or preventing it if there are any system flaws.

Falcons prey on smaller birds, catching them in mid-air at speeds that can approach 300 km/hour. This requires both keen vision and an eye surface that stays clean and lubricated, even at high speeds. Falcons have a third eyelid, called a nictitating membrane, that sweeps often and rapidly across the cornea.

The leading edge of the nictitating membrane of falcons has a connective tissue fold called the marginal plait. The marginal plait has countless hair-like structures along its surface known as microvilli, which act like a microscopic feather duster in collect-



Peregrine Falcon, Falco peregrinus.
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http://commons.wikimedia.org/wiki/ Image:Peregrine Falcon profile shot.jpg

ing tear film and particulate debris and sweeping it into an enlarged puncta, which then drains into the nasolacrimal system.

Falcons also have a special gland, the Harderian gland, located at the base of the nictitating membrane. This special gland

lubricates the ocular surface with a highly viscous, evaporation-resistant solution to prevent wind from evaporating the tear film on the eye surface.

Such highly specialized features of the falcon's eyes, along with extraordinary visual acuity and terrific speed, have to all be perfectly in place for these birds to survive. Partially-developed features would not function at the level necessary for the survival of these birds, thus arguing strongly against their stepwise development.

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