

Creation Matters

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The New Fabrica

by Alan L. Gillen, M.S., Ed.D.

For Thou hast possessed my reins: thou hast covered me in my mother's womb. I will praise thee; for I am fearfully and wonderfully made: marvelous are thy works; and that my soul knoweth right well. Psalm 139:13-14

wo thousand years after the writing of Psalm 139, Andreas Vesalius (Figure 1) began to unlock the mysteries of the human body. When Vesalius was born in Brussels in 1514, no one could have foreseen that anatomy would be changed forever. During Vesalius' time, the teachings of the Greek physician Claudius Galen (130-201 A. D.) were the ultimate authority on anatomy. Because Galen had dissected very few (if any) human cadavers, his anatomical descriptions were limited to animal dissections. Galen's works contained many errors because his conclusions regarding human body functions were based on data obtained from nonhuman animals. Vesalius developed a great interest in human anatomy that caused him to question certain aspects of Galen's teachings and seek to prove them inaccurate. Vesalius, a devout Roman Catholic, understood there to be a Master Craftsman behind the fabric design in the human body.

In 1537, Vesalius completed a medical degree and delivered various lectures on surgery. He did not follow the traditional approach of studying the human body. Unlike Galen, Vesalius turned to human corpses for his dissections. His radical methods and desire for truth enabled him to write the text *De Humani Corporis Fabrica*—the most accurate and comprehensive book on human anatomy ever written in his time. The seven-

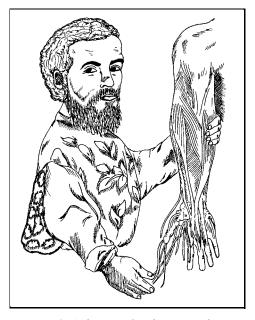


Figure 1. Andreas Vesalius dissects a cadaver.

Notice his detail to the muscles and tendons of the lower arm and hand. Redrawn from his masterpiece,

De Humani Corporis Fabrica.

his vivid, fabric-like drawings.

De Humani Corporis Fabrica was an excellent title for this new anatomical encyclopedia. The word fabrica (or fabricae) is Latin for craft, trade, industry, workmanship, and the process of building, construction, and production. A related Latin word, fabre, is an adverb that means skillfully. Fabric is frequently used as an adverb to describe a tapestry, interwoven quilts, mosaics, and cross-stitching.

Parallels in Scripture and body design

We see parallels in the Scripture and in body design. Henry Morris (1995) says, in his annotations of the Defender's Bible reading for Ps. 139:15, "Curiously wrought" means embroidered, a striking description of the double-helical DNA molecule program which organizes part by

...continued on p. 2

volume work was completely illustrated with hand-made engravings.

The diagrams portrayed in Fabrica vividly imply the theme of an Intelligent Designer in the interwoven human body. His writings boldly challenged hundreds of Galen's teachings on how the body operates. Many traditional, pro-Galen anatomists attacked Vesalius' book, but they failed in every attempt. No matter where his opponents looked, they were rebuffed with the accuracy of details that Vesalius used when describing and depicting human anatomy with

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part the beautiful structure of the whole infant." In Ps. 139:16, his annotation for *fashioned* reads: "The embryo is being fashioned in a way analogous to the way in which God 'formed' (same word) the body of Adam from the dust of the earth (Genesis 2:7)."

Charles Ryrie, in another highly respected study Bible, (1994) explains that in Ps. 139:13, "hast possessed" means acquired by creation, that "reins" means inward parts, and that "hast covered" implies did weave. In this Psalm David writes, under inspiration, about structures (inward parts) which have been woven into the embryo by the Creator. Like the helical symmetry of DNA woven into the blueprint of life, God's plan for our life

often appears like a woven tapestry.

Medical imagtechnologies ing microscopes and have improved the visibility of hidden anatomical and microscopic parts of the human body. The new images, like X-rays, MRIs, PET scans, and electron micrographs have improved not only diagnostic techniques, but have also helped biologists visualize the intricacies of human anatomy and histology in the 20th Century (Tortora and Grabowski, 2000). These images have strengthened and confirmed the idea that we are fearfully and wonderfully made. Our awesome anatomy, as revealed by radiographs and micrographs, surely constructed

by an Awesome Creator.

No matter where an anatomist or histologist examines the human body, he is confronted with fabrica-like designs, patterns that have been seamlessly woven into all eleven body systems (Table 1). Some easily recognized interlacing patterns include the double stranded DNA molecule, a villus of the small intestine, an alveolus of the lung, a nephron from the kidney, and a capillary from a lymph node. Each of these represents a tapestry, helical structure, and/or fabric design in nature (Van de Graff, 1999).

Interwoven complexity

In each body system, we observe parts that may be described as intertwining, interlocking, and interlacing. The interdependent parts, woven together, appear to be the "fingerprints" of a divine Craftsman, or Artificer. We might describe this collection of intertwining, interlocking, and interlacing parts as *interwoven complexity* (Gillen, 2000). Some of the most perceptible evidences of a Skilled Craftsman include high interdependence and harmonious working of diverse body structures and systems. These fabric-like tissue components are analogous to the irreducibly complex, biochemical examples given by Michael Behe (1996).

The fabric-of-life idea reveals that the Creator purposely wove together, piece by piece, the eleven organ systems (made up of four basic tissue types). The Master Weaver also stitched a network of vessels containing dozens of specialized cells to form a finished masterpiece fabric that surpasses all others in intricacy, specificity, and beauty. Upon closer examination, one can see that no matter what level of the body is analyzed (e.g., organ, tissue, cellular, or molecular), elegant design is evi-

Table 1. Body Systems with Their Interwoven Components		
Organ System	Interwoven Components	
1. Digestive	villi — capillaries and lacteal	
2. Circulatory	twisting (helical) fibers inside chambers of the heart; capillary junctions with each body system	
3. Respiratory	alveolus, bronchiole tubes, and capillaries of lung	
4. Immune / Lymphatic***	lymphatic capillaries, spleen, reticular fibers in spleen	
5. Excretory	juxtamedullary nephron, peritubular capillaries	
6. Endocrine	nerve/endocrine junction in pituitary stalk	
7. Reproductive	umbilical cord, uterine blood supply, seminiferous tubules, epididymis, double helix DNA in germ cells	
8. Nervous	astrocytes, neurons, oligodendrocytes, microglia, brain capillaries making up the blood-brain barrier	
9. Integumentary	glands, hair, nerve network in skin dermis	
10. Skeletal	osteon (haversian system of bone) with nerves, fibers and vessels intertwined	
11. Muscular	sarcoplasmic reticulum, t-tubules in myofibril of skeletal muscle fibers	

*** Anatomical structures in our body's defense system are collectively known as the lymphatic system, and the functional body defense systems are collectively known as the immune system. The lymphatic and immune systems are flip sides of the same coin.

dent (Table 1). Other examples of interweaving in the body include the intricate blood vessels in the heart, the retina of the eye, the myofibrils of skeletal muscle, the haversian system (osteon) in compact bone, and the precise arrangement of cells (astrocytes, capillaries, oligodendrocytes, microglia, etc.) that make up the bloodbrain barrier (Van de Graff, 1999).

Defying chance

In his song of praise to God, the psalmist beautifully pictures the weaving together of a human being within the womb:

My substance was not hid from thee, when I was made in secret, and curiously wrought in the lowest parts of the earth. Thine eyes did see my substance, yet being unperfect; and in thy book all my members were written, which in continuance were fashioned, when as yet there was none of them. Ps. 139:15-16

The psalmist, however, had no idea how scientifically accurate his picture was. In the Old Testament era, man had never heard of DNA or RNA, the helical and symmetrical molecules that are woven together to produce the blueprint of life. Yet with great accuracy, the psalmist depicts the skillful fabric of the human body. This interwoven complexity, along with each organ's intricacies, defies chance. The probability of macroevolution occurring by mutations and natural selection is extremely close to zero — an observation which points to an Intelligent Designer. There must have been a Creator to weave such a beautiful fabric into each of the body systems.

The complexity of the human body is direct evidence against macroevolution. In the early 1990's, Dr. Charles Thaxton argued for the intelligent design of the human body with the *principle of uniform experience* (Gillen, Sherwin, and Knowles, 1999). If one observes in everyday life that an object has symmetry, purpose, exacting specifications, and high interdependence, then the most logical deduction is that the object has been made by an intelligent cause.

To illustrate the complex nature of

this principle, one may look at the formation of a beautiful tapestry in a weaver's loom. First, a fabric designer needs to design the blueprint for the tapestry, deciding which colors and patterns to use. The seamstress must also decide what type of fabric she will use for the tapestry. She cannot randomly pick colors and fabrics, for they must coordinate and compliment each other. Next, the weaver must determine how to mix and intertwine the strands of thread. On a simple loom, she will weave the secondary threads under and over the primary threads. Each individual thread meshes tightly against the next thread. Slowly, carefully, the designer weaves together her beautiful picture, one thread at a time. When the seamstress has finished her completed picture, she releases it from the loom.

Anyone looking at the rich tapestry ... would immediately praise the designer ... Yet the very same people will ... claim that the complex human body happened by chance.

Praising the designer

All customers who look at the tapestry see only the one complete fabric. However, if one looked close enough, he would see all the individual threads seamlessly woven together. Anyone examining the rich tapestry and the vibrant colors would immediately praise the designer, realizing that only a master designer could produce such a magnificent work of art.

Yet, the very same people will turn around and claim that the complex human body happened by chance. The body, however, is woven together just like a tapestry. For example, look at the interwoven complexity of a single skeletal muscle. When one initially glances at a muscle, he will see a tough, translucent mass of tissue. Under the microscope, however, the amazing interwoven design manifests itself.

Each muscle is composed of muscle fiber bundles. In each fiber, many myofibrils and nuclei are enclosed within a common sarcolemma. Each myofibril, in turn, contains numerous sarcomeres, arranged end to end in a single file and bound by Z-lines. There are hundreds of sarcomeres in a single muscle, with each overlapping the next one in a long string. These sarcomeres have two parts to them. Thin actin filaments surround a thick myosin filament. When the actin filaments are attracted inward toward the myosin filaments, the Z-lines are pulled toward each other, shortening the sarcomere. When rows of sarcomeres shorten, the muscle cells contract. When many muscle cells contract, the entire muscle shortens.

All of these individual parts are needed just to make one single muscle contract. Yet, there are nearly 700 muscles in the human body. Indeed, the complexity of the human muscle must have come

fr0m the blueprint of a master Weaver. Just as one would acknowledge the intelligent creation of a tapestry, so also must one acknowledge the intelligent Designer of the human body. This chain of logic, which compares the making of a tapestry to the formation of a human muscle, illustrates the principle of uniform experience.

Summary and conclusion

The origin of design in the human body has fascinated biologists since the time of the ancient Greeks. It was not until the Great Reformation, however, that Andreas Vesalius, a Belgian anatomist and physician, was allowed to dissect human cadavers. This furthered human anatomical and physiological studies because scientists investigate theories by experiment instead of just speculating on the unknown. It was then that man really began to understand the wisdom in the inward parts, and sought to understand the products of the Creator's design and plan for the human body. In those days, explorers of the human body began "thinking God's thoughts after Him" (Gillen, Sherwin, and Knowles, 1999).

If evolutionary skeptics would look closely at the human body, they would see all the individual "threads" (i.e., parts) seamlessly woven together. Those viewing a rich tapestry with intricate patterns and vibrant colors would immediately praise the designer, because they realize that only a master designer could produce such a magnificent work of art. How can these very same people then claim that the infinitely more complex human body happened by chance? The body, sewn together more skillfully than any man-made tapestry, contains many multi-faceted, interrelated, and interdependent systems that are masterfully woven together by the Master Craftsman and Creator, Jesus Christ!

References

Behe, M.J. 1996. Darwin's Black Box: the Bio-

- *chemical Challenge to Evolution.* The Free Press, New York.
- Gillen, A.L., F. Sherwin, and A.C. Knowles. 1999. The Human Body: an Intelligent Design. Creation Research Society Books, St. Joseph, MO.
- Gillen, A.L. 2000 (IN PRESS). Body by Design: the Anatomy and Physiology of the Human Body. Master Books, Green Forest, Arkansas.
- Morris, H.M. 1995. *The Defender's Study Bible*. World, Grand Rapids, Michigan.
- Ryrie, C. 1994. Ryrie Study Bible, Expanded Edition, (KJV). Moody Press, Chicago, IL.
- Tortora, G.J. and S.R. Grabowski. 2000. Principles of Human Anatomy and Physiology, 9th ed. John Wiley Publishers, New York.

Van de Graff, K.M. 1999. Human Anatomy, 6th ed. Wm. C. Brown Publishers, Dubuque, IA.

Van de Graff, K.M. and S.I. Fox. 1999. *Concepts of Human Anatomy and Physiology*, 5th ed. Wm. C. Brown Publishers, Dubuque, IA.

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"Teaching and Propaganda" by Mano Singham

Reviewed by Del Dobberpuhl

n response to a *Physics Today* letter to the editor (V. Klemeš, March 2000, p. 100) about last year's action by the Kansas State Board of Education, Dr. Singham of Case Western Reserve University wrote an opinion article entitled "Teaching and Propaganda" (*Physics Today*, June 2000, pp. 54-55). Singham's interests lie in the teaching of physics to freshman and sophomore college students in his course on modern physics. He is also associate director of the University Center for Innovations in Teaching and Education.

Singham expresses his point of view, not directly on the creation-evolution controversy, but on the more encompassing subject of science versus religion in education today. His opinion is refreshing in that he recognizes that the majority of information given to the student in lower level science courses is provided without

proof and is significantly biased by the teacher and the powerful scientific (in his case physics) "establishment."

In his introductory paragraphs,

Former students

Singham introduces two of his former students as examples of how this controversy has arisen in his teaching experience. Doug, an excellent student, wrote at the top of an almost perfect exam paper, "I still don't believe in relativity!" The other student, Jamal, was not as direct and waited for a more discrete opportunity several years later just prior to graduation. He told Singham that he could not believe in the Big Bang because "It kind of conflicts with my religious beliefs."

Singham did nothing about the statements made by either student, but he did reflect on how this could be happening in his classes. In a parenthetical statement, he makes it quite clear he is "perfectly comfortable with the standard scientific models of cosmology and evolution" and is "not a closet creationist."

Singham states that the deeper he looks into the subject matter he is teaching,

"a sense of puzzlement comes over him." It's not that a few students do not believe what he is teaching, but rather, why the great majority do believe it. He states that "the ideas of relativity and quantum mechanics are so contrary to everyday experience that I would expect students, on first hearing these notions, to reject them out of hand."

Brainwashing and propaganda

His conclusion about why this is happening is not that the students are being dualistic to get a grade, but that they are trusting in him to be correct in what he is teaching them. Then he states, "I use that trust to effectively brainwash them." After that statement he makes it clear that he considers the teaching methods used to teach modern physics to be primarily propaganda.

They do not admit that what they are teaching is mainly propaganda, and that the method they are using could be labeled brainwashing rather than teaching.

Propaganda to him is introducing arguments or evidence that only support the establishment position, and omitting or glossing over evidence to the contrary. He states, "We give short shrift to alternative theories, introducing them only in order to promptly demolish them," which makes any students who disagree with the establishment's position think they are being illogical and not modern thinking scientists.

He then gives the reasons behind using propagandistic methods. First, he wants his students to know everything that it takes to be a modern scientist; and second, there is not enough time for each student to verify, by experiment or inferential thought, what is being taught in such a condensed course. In other words, the student is not yet in a position to think for himself, and is not

given the time to develop his own theories.

In his article's closing section, labeled "Conflicting goals of teaching," Singham addresses his main point: what is the best result of teaching his modern physics course in this manner? Is it better for a student to believe everything he is taught, or should he question everything that is based on the teacher's authority alone but goes against the student's personal beliefs? The answer, in Singham's own words, is: "The best I can hope for is to enable my students to think critically, to detect propaganda and reject intellectual coercion, even when I am the one doing it."

In stark contrast

It is the stark contrast between what Singham writes and the position of the National Science Teachers Association (NSTA) that makes this article stand out.

The NSTA, with the aid of the ACLU and other organizations, is lobbying for no interference from students, parents, or local and state school boards in spreading their evolutionary propaganda. They do not admit that what they are teaching is mainly propaganda, and that the method they are using could be labeled brainwashing rather than teaching.

When scientists start teaching their own positions to the exclusion of any alternatives, and expect their students to believe them, they have, in my opinion, crossed the line between science and religion. Their political effort to establish evolution as the foundational principle undergirding all science is nothing more than an attempt to replace good science with evolutionary propaganda and brainwashing. We have read it in the words of Dr. Singham, one of their own practitioners

Physicist Del Dobberpuhl, who is retired from the Naval Weapons Laboratory, is a research assistant at the Van Andel Creation Research Center.

Why Creation is the Correct Account of the "Origin of the Species"

by Ed L. Petruso

Editor's note: Many times each year we hear from students who wish to write reports on creation vs. evolution. From time to time we will publish especially well-written student essays.

In arguing for scientific creation, I will present evidence that supports the notion that the earth is less than 10,000 years old, that creation as depicted in Genesis is a historical fact, and that this creation was of divine origin. For too long creation has been banned from the schools not only as the only rational depiction of origins, but even as a legitimate rival for evolution theory. This is because, according to Ken Ham, evolution is not really a science, but a religion that forms the basis of humanism (Ham, 1998).

As a religion, evolution cannot have any rivals in thinking. According to David Buckna, students are encouraged to ask *how* evolution occurred, but not *whether* evolution occurred (Buckna, 2000). That is one reason why providing evidence for creation is important. It is also important because, if we can show that Genesis is true, other parts of the Bible can be believed, and more lost people will be saved by Christ's love.

First I will outline the major points of contention and points of agreement between evolution and creation theory. It is important to note that we have no disagreement with the evolutionists in actual observations. It is the interpretation of those observations that causes differences (Ham, 2000). Creationists agree that natural selection and adaptation exist; those are well documented facts (Lester, 1995). They also believe a limited "micro-evolution" is possible; that is, between *species* but not between *kinds*.

There is some evidence that when God mentions "kind" in Genesis, he is not referring to species, but to higher taxonomic classes, perhaps the genus (Anonymous, 2000). Creationists can accept an evolution of wolves to dogs, for example, but not an evolution of bacteria to man. Not only does God say nothing about this kind of "macro-evolution," the actual scientific data say nothing about it either.

Points of contention

Here are the points of contention between evolution and creation. By the creationist model, life arose by the acts of a Creator. Evolution, of course, proposes no such Creator and posits purely naturalistic processes. Creation proposes basic plant and animal kinds with complete characteristics in the first representatives. According to evolution, all living things originated from a single living thing, which in turn originated from inanimate matter. Origin of each kind was from an ancestral form by slow gradual change. Creation proposes that variation and speciation are limited within each kind.² Evolution, on the other hand, involves unlimited variation (Gish.

Before we go into the factual support of creation and refutation of evolution, I want to discuss broad philosophical problems with evolution. According to Gish, that problem is with falsifiability. The theory, as it is constructed, is so plastic that it can be molded to fit any kind of scientific evidence. Therefore, there are no data that can disprove it. This makes evolution not a science fact or a science theory. It is a science nothing! It is at best a "philosophy" and not a very good one at that (Gish, 1978). However, contrary to Gish, I will next falsify evolution indirectly by putting the history of life in such a constrained time frame as to make evolution impossi-

The first line of attack is to establish that the earth is less than 10,000 years old. If the Bible's genealogies are correct, we believe that the world is less than 10,000 years old because that is what you'd expect. The first estimate of this sort was done by James Ussher, the Irish Archbishop of Armagh (Pennock, 1999).³

Establishing a young earth will be the most devastating to evolution. If we show that the earth is less than 10,000 years old, evolution cannot be true (since evolution takes millions of years). What is the evidence for a "young earth"? There are many lines of evidence that show the earth to be

much younger than thought by evolutionists. Some of it is astronomical evidence, and some of it is evidence seen right here on earth. Here I will survey this evidence, each piece making the oldest possible earth younger and younger.

Age of the earth

Let's look at some of the astronomical evidence. One is that galaxies wind themselves up too fast for our spiral galaxy to be billions of years old. If the Milky Way existed longer than a few hundred million years, it wouldn't be a spiral galaxy, but a spherical one (Humphreys, 1999). Evolution also has a problem with comets. Even though the material for comets is supposed to be as old as the solar system, about 4.5 billion years according to evolutionists, comets disintegrate within 100,000 years, and most comets are not older than 10,000 years. Evolutionists explain this discrepancy by positing an unobserved, made-up "Oort cloud" that continuously replenishes the supply of comets (Humphreys, 1999; Faulkner,

There is also much geological evidence for a younger earth. There is only enough sodium in the ocean to account for 62 million years. The amount of mud on the sea floor indicates an earth no older than 12 million years. If the rate of decay in the magnetic field were the same as it is now (and there is no good reason to think otherwise), the earth's field, and therefore the earth, should be no older than 10,000 years (Humphreys, 1999). We have now established the age of the earth as postulated by creation science (less than 10,000 years) to be more reasonable than the evolutionist age.

But what about all the geological structures, fossils, and other so-called evidence for an old world? That can be easily explained by the flood described in Genesis. For example, experiments have shown that in the presence of running water, still water, or air, minerals of different grains spontaneously aggregate into strata. Simi-

lar experiments were published in the world famous science journal *Nature* (Snelling, 1997). The flood can also explain such things as stratification of the fossils, current position of plate tectonics, and all other geological phenomena (Pennock, 1999).⁴

Since evolution cannot occur in less than 10,000 years, evolution is effectively debunked. But, just to make the case even stronger, what other evidence can we cite against evolution and for creation?

The fossil record

The next most obvious place to settle the dispute between creation and evolution is the fossil record. There are many gaps in the fossil record, even though research has been ongoing for many years. These gaps are not random; they are gaps, not between species, but between higher categories, the created kinds depicted in Genesis. This is a serious problem for evolution theory, but a major victory for creation science (Gish, 1985).

Creationists are not the only people aware of this lack of transitional forms. The famous paleontologist Stephen Jay Gould called the gaps in the fossil record "paleontology's trade secret." He proposed a jerky type of evolution, called punctuated equilibrium, to allow for fast evolution in some spots to circumvent the lack of fossil evidence. Mark Ridley, a zoologist and evolutionist, is calling on people to ignore the fossil record as evidence for evolution against creation (cited in Gish, 1985). Indeed, such statements by professional evolutionists indicate that some evolutionists are aware that the fossil record has the information to discredit their "theory."

Genetics and biochemistry

There is also genetic and biochemical evidence against evolution and for an intelligent Creator. There are two main requirements for a valid theory of evolution, according to Mark Ridley. One is that it must explain why evolution takes place. The other requirement is that it must fit the facts of heredity (Ridley, 1985). Genetics has always been the enemy of evolution. Biology recognizes three sources of variation of organisms: environment, recombination of genes while producing gametes, and mutation.

Can any of these processes create a new "kind" of organism? No. All that environment (natural selection) and recombination can work with are the genes in the population. Virtually all mutations in an organism's genome will be ineffectual or harmful (Lester, 1995). Therefore, no new kinds can result from any genetic processes.

There is also biochemical evidence against gradual evolution. Many complex proteins such as hemoglobin cannot function at all (not just less efficiently) when one part is removed. This is like a mousetrap; all parts must be there for it to work. Just as you cannot "evolve" a gradually developing mousetrap by adding more parts to make it work better, you cannot evolve many of the biochemical processes in the body. Therefore, these processes had to be created by intelligent design (Behe, 1996). I have delineated some of the important arguments for creation and against evolution. Now let's examine what evolutionists hold as evidence.

Vestiges and dysteleology

Evolutionists believe that vestigial structures in humans and other species lend evidence for their case. Vestigial structures are structures in an organism that have no known function, but presumably had a function in an ancestral form. First, at least in humans, the number of so-called "vestigial structures" has dwindled to almost none, where there used to be 180. Among those to go was the most famous such structure, the appendix. The appendix, thought to be useless in humans, is now known in medicine to have a function in the immune system (Wieland, 1997).

Another piece of "evidence" evolutionists use against creation is dysteleolgy. Dysteleolgy basically means that since no human engineer would come up with such a ludicrous design, it surely cannot be the result of an omniscient intelligent designer. Dysteleolgy arguments are vacuous and miss the point. It is like an evolutionist who finds a watch on the beach and denies a watchmaker because it is, according to him, an imperfect design. The issue is that there is a watch that cannot be explained by random action, not that the watch isn't perfect (Woodmorappe, 1999).

One example of this is the Panda's

"thumb." The Panda's thumb differs from human thumbs in that it originates not from the hand but from the wrist bone. According to S.J. Gould, the structure is imperfect because it does not allow for opposability, but only allows a pincher grip. He says that because the "real" thumb was co-opted for supporting weight in previous bear species, the best remaining solution was this clumsy arrangement (Woodmorappe, 1999). This argument fails for two reasons. One is that it has been shown that this structure is actually efficient. Another shortcoming is circular reasoning. Gould already posits previous bear species leading to the panda, when that is what he is trying to prove (Woodmorappe, 1999).

Conclusion

This paper has shown that evolution is a lot less supported, and creation a lot more supported, than evolutionists would have you believe. Creation is not only a legitimate rival in explaining origins, but is the only reasonable alternative given the present state of science. I hope I have shown that while creation scientists look at all pieces of information in constructing their models, evolutionists routinely ignore evidence that contradicts their theory and their materialist, humanist world view (such as the fossil record). I hope this will encourage the reader to always question the so-called authorities and experts. They do not know everything, and they, like every-one else, have biases and self serving motives.

Notes

- 1. Discussed in context with Noah's ark feasibility, in which it was shown that two each of all the 8,000 genera of land vertebrates could fit on the ark.
- 2. Evolutionists say speciation has actually been observed and that this refutes the creationist position. An example includes two forms of flies that lay their eggs in different fruits and are diverging into two species (see Freeman and Herron, p. 59). However, to my knowledge no one has ever observed the emergence of a new kind beyond the genus level. This is our contention, and saying that we do not allow for any speciation is a straw man argument.
- 3. p. 10. In the 17th century, Ussher, by tracing Biblical genealogies, calculated

that the world was created about 6000 years ago. Cambridge University's John Lightfoot refined that estimate by saying that the world was created on October 18, 4004 B.C. and that Adam was created on the 23rd at 9 A.M. Today's creationists allow for a greater margin of error and just say the world was created less than 10,000 years ago.

4. Dr. Walter Brown's seminal book In the Beginning: Compelling Evidence for Creation and the Flood, is cited in Pennock, 1999 (p. 13). In his book, Brown describes how the continental plates got to their present positions (by the flood waters pushing on the mid-Atlantic rift and therefore pushing the continents), and how fossils were deposited by flood waters. Small (less complex) animals were first to be crushed by the flood sediment, then "higher" animals, until finally birds were inundated. Pennock, an evolutionist, tries to be critical, but his strongest criticism of

this well thought out theory is that it "...illustrates the great divide that separates their approach from that of scientists." Any more ad hominem arguments or arguments from authority, Mr. Pennock?

References

Anonymous. 2000. Were dinosaurs on Noah's ark? <www.answersingenesis.org/docs2/4351news 7-26-2000.asp>.

Behe, M.J. 1996. *Darwin's Black Box*. New York: Free Press.

Buckna, D. 2000.

<www.answersingenesis.org/docs/506.asp.>
Faulkner, D.R. 1997. Comets and the age of the solar system. Creation Ex Nihilo Technical Journal 11:264-273.

Freeman, S. and J.C. Herron. 1998. Evolutionary
Analysis. New Jersey: Prentice Hall. p. 59.

Gish, D.T. 1978. Evolution: The Fossils Say No! California: Creation-Life Publishers. pp. 13, 17.

Gish, D.T. 1985. Evolution: The Challenge of the Fossil Record. California: Creation- Life Publishers. pp. 229, 249-259.

Ham, K. 1998. Why don't schools teach creation?

X-Nilo Files 1(1),

<www.answersingenesis.org/docs/3903.asp>.Ham, K. 2000. Evidence — it's all the same! An-

Ham, K. 2000. Evidence — it's all the same! An swers Update 7:1-7.

Ham, K., and C. Wieland. 1997. Your appendix: it's there for a reason. *Creation Ex Nihilo* 20(1):41-43.

Humphreys, D.R. 1999. Evidence for a young world. *Creation Matters* 4(4):1.

Lester, L.P. 1995. Genetics: enemy of evolution. Creation Research Society Quarterly 31:1a-7a.

Pennock, R.T. 1999. *Tower of Babel: The Evidence Against the New Creationism*. Massachusetts: MIT Press. pp. 10, 13.

Ridley, M. 1985. *The Problems of Evolution*. Oxford: Oxford University Press. p. 26.

Snelling, A. 1997. *Nature* finally catches up! *Creation Ex Nihilo Technical Journal* 11:125-126.

Woodmorappe, J. (1999). The panda thumbs its nose at the dysteleological arguments of the atheist Stephen Jay Gould. *Creation Ex Nihilo Technical Journal* 13:45-48.

Ed is a senior at the University of Southern Indiana majoring in psychology.

What Do Fossils Prove?

ccording to Luther Sunderland, fossils prove very little if anything. He produced a short but valuable work on this whole matter of fossils, which is certainly worthy of study [Sunderland 1984]. I frequently have asked my friends, when I would encounter them working in the paleontological laboratory on a specimen, what they were studying. Upon their replying "We are studying the life of the past," I would reply, "Not so." All you actually are doing is studying some peculiar material in the rock matrix, which you believe seems to resemble some form of past life. On the basis of your observations as to the nature and circumstances of this form, to what extent it resembles some present-day forms, etc., you are drawing a number of conclusions:

- a) as to what the inclusion might be,
- b) whether they were once living or not,
- c) and if the former, what their environment might have been.

Such conjectures may or may not have been correct. The answers to the foregoing questions would be assumptions, and of necessity would remain so. In addition there have been actual instances of conclusions drawn which then later had to be rescinded. Admittedly this has been the case mainly in Cambrian and pre-Cambrian rocks.

Excerpted from Origins: What Is At Stake (page 40, 1991) by Wilbert H. Rusch, Sr. Available from CRS Books.



Speaking of Education

Inadequate Coverage of Evolution by Most Leading Biology Textbooks

S eattle, WA — In a critique on biological pseudo science, a Discovery Institute scientist issued failing grades to popular biology textbooks after he found that they inadequately cover the evidence for Darwinian evolution.

The report, "An Evaluation of Ten Recent Biology Textbooks," which will be published in September by Discovery Institute's Center for the Renewal of Science and Culture, examines ten of the most popular high school and college level textbooks and issues grades based on their presentations of the theory of evolution.

For example, textbooks present students with drawings of similarities between fish and human embryos, and claim that these similarities are evidence that fish and humans share a common ancestor. And, photographs of light and dark colored moths on tree trunks are used to teach students how natural selection altered the proportions of the two forms when trees were darkened by pollution during the industrial revolution.

"But scientists have known for over a century that the embryo drawings were faked," said biologist Dr. Jonathan Wells, author of the report and a senior fellow of the Seattle-based Discovery Institute. "The embryos actually look very different. And all of the peppered-moth pictures were staged. Scientists have known since the 1980s that the moths do not normally rest on tree trunks. And yet textbooks have failed to change with the times."

"Science is the search for truth," explained Wells. "Most biology textbooks are simply lying to students about the evidence for evolution."

Wells also analyzed five other misleading icons of evolution used in biology textbooks.

"We're not trying to ban the teaching of evolution, we're trying to improve it," explained Wells. "We want students to learn more about evolution than promoters of Darwin's theory want them to know. And we want to give them the resources to think critically about what they learn."

Darwin's theory of evolution is the officially approved scientific account of the origin and history of life and is presented to millions of people every year in biology classes, magazine articles, and television nature documentaries. Such presentations typically rely on vivid images that embody key elements of the story. Yet many of the images, which Wells has dubbed "icons of evolution," misrepresent the truth and amount to nothing more than junk science.

"The pattern of misrepresentation in biology textbooks betrays a dogmatic approach to teaching evolution that ignores or distorts the evidence, to the detriment of both students and teachers," noted Wells.

"What Wells might have added," points out Jon Buell, President of Foundation for Thought and Ethics in Dallas, Texas, "is that teachers don't know the mythological dimension of these icons. I had Dr. Wells address an audience of high school biology teachers, and it was obvious his information, though well documented, was new to them."

"Dogmatic Darwinists claim that nothing in biology makes sense except in the light of evolution, and textbooks misrepresent the evidence to promote that view," said Wells. "The truth is, nothing in biology makes sense except in the light of evidence, and our children deserve to know what the evidence really is."

The complete report of Dr. Wells' textbook study is available online at Discovery Institute's website at http://www.crsc.org/biology/. To receive a copy by fax or mail, call (206) 292-0401 ext. 107.

— News release courtesy of Discovery Institute.

¹ Editor's note: Creationists have led the way in revealing not only the true nature of this so-called embryological evidence for evolution, but also the failings of textbook authors in this regard. Readers are referred to the following article: Wolfrom, G.W. 1975. Perpetuation of the recapitulation myth. Creation Research Society Quarterly 11(4):198-201.

Kansas' New Science Standards in Jeopardy

The scientific and education establishments, after having a conniption fit over the state's revised science standards, have just heaved a huge sigh of relief. In the August Republican party primary elections, three of four state Board of Education members who voted for the new standards were defeated in their reelection bids. Since the standards were approved last year by a 6-4 margin, it is a forgone conclusion that the standards will be rewritten to the satisfaction of the evolutionists.

The defeats were orchestrated by organizations that, with the aid of the local and national media, propagated misinformation about the revised standards and their impact. For example, in reporting on this turn of events, *Nature1* reported, erroneously, that evolution was "dropped" from the state standards. As a result, it was said that international embarrassment was brought to the state, scientists rejected positions at Kansas universities, high-tech businesses located elsewhere. No documentation of such accusations has, to my knowledge, been provided.

¹ Dalton, R. 2000. Kansas scientists help to oust creationists. *Nature* 406:552.

Colorado Charter School in Hot Water

P or over a year now the Liberty Common Charter School has been under attack for their refusal to teach human evolution. Of interest is the fact that since 1995 there has been no requirement by the Colorado state standards that evolution be taught.

When the school began in 1997, it was using a curriculum called Project 2061, sponsored by the American Association for the Advancement of Science (AAAS), which included human evolution. Apparently, the school, which has never taught human evolution, has now dropped the AAAS curriculum. It is alleged that this change invalidates the school's charter. The final say over the curriculum conflict is in the hands of a Colorado school board administrative law judge.

Creation Calendar

Note: Items in "Creation Calendar" are for information only; the listing of an event does not necessarily imply endorsement by the Creation Research Society.

October 7-8

Creation Conference with Don DeYoung, Ph.D.

First Baptist Church, Mentone, IN

Contact: Pastor Joe Olson (219)353-1712

October 8-14

Utah Weird and Wild - geology trip to the remote, new

Grand Staircase - Escalante National Monument in southern Utah

Creation Safaris (www.creationsafaris.com)

Contact: Dave Coppedge (661)298-3685, bwana@creationsafaris.com

October 17

Mankind Evidence for Being Made in God's Image by Robert Walsh

Creation Science Fellowship (Pittsburgh area) 7:30 pm, Mars CM&A Church, Mars, PA

Contact: (412)341-7908, csf@trfn.clpgh.org

October 21

Human Physiology and Design by Joseph Mastropaolo, Ph.D.

Bible Science Assoc'n, San Fernando Valley Chapter

7:00 pm, Our Saviour's Lutheran Church, Granada Hills, CA

Contact: Mark Armitage (626)815-6000 x5519, marmitage@apunet.apu.edu

October 28

KATY Bike Trail — Bicycle trip along the Missouri River 9 am - 5 pm, CSA for Mid-America (Kansas City area)

Contact: Tom Willis (816)618-3610, csahq@juno.com

November 11

Kartchner Cavern Discovery — newly discovered cave near Tucson, AZ

(plan ahead - tickets are limited)

Creation Safaris (www.creationsafaris.com)

Contact: Dave Coppedge (661)298-3685, bwana@creationsafaris.com

November 18

Squaw Creek Wildlife Refuge / Fossil Hunt

9 am - 5 pm, CSA for Mid-America (Kansas City area)

Contact: Tom Willis (816)618-3610, csahq@juno.com

November 18

Cell Structure in Rapidly Fossilized Vertebrates — A Preliminary Report

by Mark Armitage, M.S. And David Phillips, M.S.

7:00 pm, Our Saviour's Lutheran Church, Granada Hills, CA

Contact: Mark Armitage (626)815-6000 x5519, marmitage@apunet.apu.edu

November 21

Evidence for the Design of the Physical Man by Robert Harsh

Creation Science Fellowship (Pittsburgh area) 7:30 pm, Mars CM&A Church, Mars, PA

7:30 pm, Mars CM&A Church, Mars, PA Contact: (412)341-7908, csf@trfn.clpgh.org

Attention CRS members:

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