Creation Matters

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The Ancients Knew Little About the Heavens Compared to Today

by Jerry Bergman, Ph.D.

It was believed for most of human history that the entire physical heavens consisted of only about 6,000 stars, all of which were very much alike, and a few planets (meaning "wanderers," based on their movement in contrast to stars). The stars were arranged into constellations, which the ancients saw as having meaning beyond their simple arrangement (Berry, 1961). Aside from this, they knew little about the heavens, believing many things that we today recognize as erroneous. We now know that the earth is but a "speck," whizzing around the sun at 66,600 mph, in a solar system that is but a "dot" in the Milky Way galaxy.

A 1995/1999 composite photo of the majestic spiral galaxy, NGC 4414, as imaged by the Hubble Space Telescope. Photo no. PR99-25, courtesy of NASA.

Our galaxy is only one member of a group of some thirty galaxies, named the "local group," a minor member of the "local supercluster," that is just one of many superclusters of galaxies existing in the universe. Without the aid of a telescope, we can see only about 6,000 stars and, aside from Biblical revelation (which does not say much about the physical heavens except for its large number of stars), no known ancient record discussed galaxies, galaxy clusters, or superclusters, all of which were discovered relatively recently (Singh, 2004).

One of the closest galaxies, and one of the most visible galaxies from the earth, Andromeda was historically thought to be an ordinary star. Simon Marius, a contemporary of Galileo, produced the first detailed description of it, indicating that it was something more than an ordinary star. It was not until much later that we realized that galaxies are assemblies of billions of stars. Even Galileo thought that the heavens were populated only by a relatively few individual stars (Berry, 1961). Astronomers eventually learned that many patches of sky contain astral objects that do not separate into stars when enlarged under higher magnification. It was only in the 1700s that nebulae were discovered, and until relatively recently they were treated merely as curiosities (Singh, 2004).

Scientists could not see very far into the universe before the advent of telescopes (and the larger, complex telescopes produced around the turn of the last century are thousands of times better than were the

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Digging Dinos: A Unique Creation Adventure

by T.P. Beh

In the past, Christians with an interest in fossils or paleontology have had few opportunities to be involved with dinosaur digs, or the collection and study of fossils. Fortunately, that situation is changing, with creation science groups like FACT (Foundation Advancing Creation Truth) and the Creation Studies Institute (CSI).

FACT, a ministry founded by Otis and Miriam Kline, offers Christians the rare opportunity to dig for dinosaur bones in the Hell Creek formation of Montana, which is famous for Cretaceous dinosaur fossils, such as those of tyrannosaurs, triceratops, hadrosaurs, and dozens of others. A portion of the formation lies in the southeastern corner of Montana, on the outskirts of the town of Glendive. This area is also home to Montana's largest state park, Makoshika, which means "bad earth" or "lands" in the native Lakota language. In addition to the 37 acres where the digs are held, the Lord has also provided FACT with a prime piece of real estate—right off the I-94 freeway—for a fossil museum, which will hopefully open in May, 2007.

CSI, a ministry of D. James Kennedy's Coral Ridge Church, is led by Tom DeRosa. As a part of its efforts to educate believers

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early telescopes). But even then some astronomers had taught that the universe extended to infinity. We now realize that an estimated one hundred billion galaxies exist, besides our own, each with an average of one hundred billion stars. This finding fully confirms the Biblical teaching that the stars are as numerous as are the grains of sand on the seashore. If you were to name each star known to exist today, and it took just a second to name each one, it would take about 317 trillion years to name them all!

Red giants, white dwarfs, and black holes

White and red dwarfs, red giants, neutron stars, double and triple stars, as well as pulsars and possibly even black holes are now known to exist—all of which were unheard of until recently. Understanding modern astronomy requires an appreciation of the life cycle of stars, and it is helpful to have some knowledge of the various types of stars. Stars are self-illuminated gaseous masses. They can be as small as the Earth, but they are, on average, enormously larger. These bright points of light differ from each other in not just mass, but also in luminosity. The most abundant star type is called a *red dwarf*. Red dwarfs, which deliver light of a reddish color, have a fairly low amount of mass (Singh, 2004).

The next category of stars includes *red giants*, bright red stars that have surface areas much greater than that of the sun. When a red giant no longer has the energy required to maintain its enormous size, it may collapse into a new type of dwarf star known as a *white dwarf*. Eventually, this new star is so dense that it has the mass of the sun compressed into the size of a small planet.

Next in the line of increasingly dense stars is the *neutron star*. This type of star can have a mass equal to that of the sun, compressed into a sphere with a diameter of only about 9 miles (14 kilometers). The last step in a dying star, the ultimate in terms of mass density, is an object that has a mass at least three times greater than that of our sun, but with a diameter as small as an automobile—a *black hole*. The black hole itself has no size at all. The size is the surrounding zone where gravity prevents escape of anything, including light. These black holes emerge from the death throes of certain types of collapsing stars.

We also now have a good understanding of what supernovas are, as well as the many other objects in the universe that were unknown (or not understood) until very recently. There is no known historical record that gives any hint of knowledge about celestial objects such as pulsars, quasars, or neutron stars. Quasars were discovered in 1963, and Neutron stars were first discovered in 1967. Neutron stars result when the pressure of gravity is so great that all electrons and protons in the star's atoms fuse together, forming a solid core of neutrons (Wright and Wright, 1991).

In many ways, astronomy has advanced so much that what was known before 1900 would be considered primitive today. Some early Greeks were aware of the size of the earth in relationship to visible stars, but the visible stars are only a minute part of the known universe—and no doubt there is much about the universe that we have yet to learn. Branley (1970, p. 35) wrote that, although the earth and nearby sky dominated the lives of early men, the heavens

> …were of supreme importance; they were omnipresent, yet they eluded probing and understanding. What were the earth and sky? How were they shaped? How large were they? Where did they begin and end? Such questions have always confounded men. But man of ancient times was not as confounded as we are.

We are even more confounded every time a new and bigger telescope is developed, because we continue to discover much more than we even dreamed exists, raising even more questions about that which we still don't know (Wright and Wright, 1991). The Hubble telescope can resolve images which have been estimated to be twelve billion light years away. This is three times as far as we could "see" before the wide-field planetary camera was installed, yet it has raised more questions than it has answered. Will this trend ever end?

A new telescope a thousand times more powerful than the ones we now have, with equally improved resolution, may open up even more wonders than we can even imagine. This, at least, has been our experience over the past century. Even our knowledge of how the sun functions, what stars are, and the actual conditions on our local planets, have all been revolutionized in the past few decades.

Books on astronomy, written in the middle ages, force the conclusion that while people then knew a great deal about what could be observed from the earth, it took a Johanas Kepler to figure out the actual orbits of the planets, as described by Kepler's famous laws. Progress then was slow and difficult because most people were preoccupied with making a living and survival—only a few rich people at that time could afford the luxury of practicing astronomy. This has now changed drastically: government and industry support astronomical research to the tune of billions of dollars annually. There are more living professional astronomers today than have lived throughout all of history.

We now have 6,000 years of research upon which to build, and communication among scientists today is far more effective than ever before. A universal language of science exists (English), and most scientists are able to access the internet. We also have the advantage of a computerized technological revolution that began during World War II with the invention of bulky, slow large-scale vacuum tube computers. The invention of the transistor in the late 1940s was also a major step that led to the development of the computer chip.

For all these reasons, the knowledge of the heavens, even through the middle ages, was only a minute fraction of one percent or less compared to our knowledge today (Wright and Wright, 1991). The statement in Psalms that "the heavens declare the Glory of God" has more meaning now than at any other time in history.

Conclusions

Our knowledge about science, even before the turn of the last century, was primitive compared to what is known today (although many of the basics taught at the high school level were known then). Nonetheless, the word "revolution" is used for good reason to describe the progress of science today, all of which clearly renders Paley's watchmaker hypothesis infinitely more viable in our age than ever before.

Importantly, the scriptures do not teach the ancient view of the heavens, but rather they teach a view that allows all of the discoveries discussed above to fit, without problems, into a biblical worldview. Even

though we now have more evidence for design (and thus a Creator), proportionately *fewer* scientists than ever before believe in Him—an enormously ironic fact. Some scientists seem to learn more and more about less and less until they know everything about nothing of real importance. Unbelief among scientists has much more to do with educational indoctrination than with the facts of science. The facts of science open both wonder and minds to the "Glory of God."

References

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Membership Matters

by Glen Wolfrom, Ph.D.

Membership benefits

Membership in the CRS has a number of benefits. These include:

1 Membership in an international, professional society which includes many of today's prominent creationists

2 Receipt of the world-class, scientific creation journal, the *CRS Quarterly*

3 A subscription to the very popular, non-technical publication, *Creation Matters*

4 Participation in CRSnet, an email-based discussion forum where you can dialog with fellow creationists

5 Submission of research proposals to be considered for possible funding with CRS grants

6 Coming soon, discounts on books purchased either via the print catalog or the online bookstore

7 Exclusive, online access to the members-only area of the Society's website

Members-only area

In this edition of "Membership Matters," we call your attention to the members-only area, which is accessed using the special member login page at the CRS website (www.creationresearch.org). Each member must register at the website, creating a unique username and password. A screenshot of the members area welcome page is shown below.

A major feature of the members area is the availability of the latest issues of the *CRS Quarterly* and *Creation Matters*, usually before the print versions arrive in your mailbox. Additionally, registered members have access to archival copies of the *CRSQ* from the last few years. Recent issues of *Creation Matters* are archived for a year, after which they are transferred to the public area of the website.

Information on how to participate in CRSnet is provided in the members area, as well as a quick reference guide for participants. Those who are interested will also find a copy of the Society's Constitution and Bylaws.

Dino Dig

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about biblical creation, CSI has been doing "fossil floats"—canoe trips down the Peace River in Florida where people can collect ice age and marine fossils. For the last two years, however, CSI has teamed with FACT to offer dinosaur digs in this fossil-rich area.

CSI's 2006 dino dig, held July 24-28 during what was surely the hottest week of the year, was attended by a diverse group of 20 people from all over the country. Participants included a 10-year-old school boy from Oregon and his grandfather, an 85-year-old retired dairy farmer from Minnesota, an artist from Washington, D.C., an antique dealer from Mississippi, two "Physical Security Specialists" (aka: locksmiths) from the Midwest, a veterinarian from New Mexico, a writer from Washington state, and even one IRS employee ("I don't have anything to do with audits") from Philadelphia. Despite the 100-plus-degree temperatures, everyone seemed to enjoy digging in the dirt. One man, who had planned to attend the dig the previous year before suffering a stroke, inspired everyone with his "gung-ho" attitude and sense of humor. This gentleman also made one of the most significant finds of the dig.

The dig

The FACT dig site in Glendive featured two main quarries—a lower one near the covered meeting/dining area with picnic tables, and an upper location about 150 feet higher up. Bones of an adult triceratops have been retrieved from the lower site, including a large nose horn section, parts of frill, a rib, and some hip bones. Unfortunately, diggers this year were only able to excavate one more piece of frill at this spot—and a lot of plant material, such as traces of tree bark, willow and cottonwood leaves, and horsetail reeds.

However, the upper site proved highly productive. There, the CSI diggers found fossils every day, including a lot of turtle shell, rib sections, vertebrae, a number of small leg bones, and, on the last day, what was believed to be an albertasaur tooth. Smaller cousins of the tyrannosaurs, albertasaurs were carnivorous therapods that, like tyrannosars, preyed on hadrosaurs and ceratopsians. Exciting as that discovery was, especially since it was made by the man who had suffered the stroke, the bones that may ultimately prove to be the most significant were those that likely belong to a baby triceratops or hadrosaur. Such finds are very rare.

2006 CSI Dino Dig Team

A tooth, presumably belonging to an Albertasaurus or a Tyrannosaursus rex*, which was unearthed during the 2006 CSI Dino Dig.*

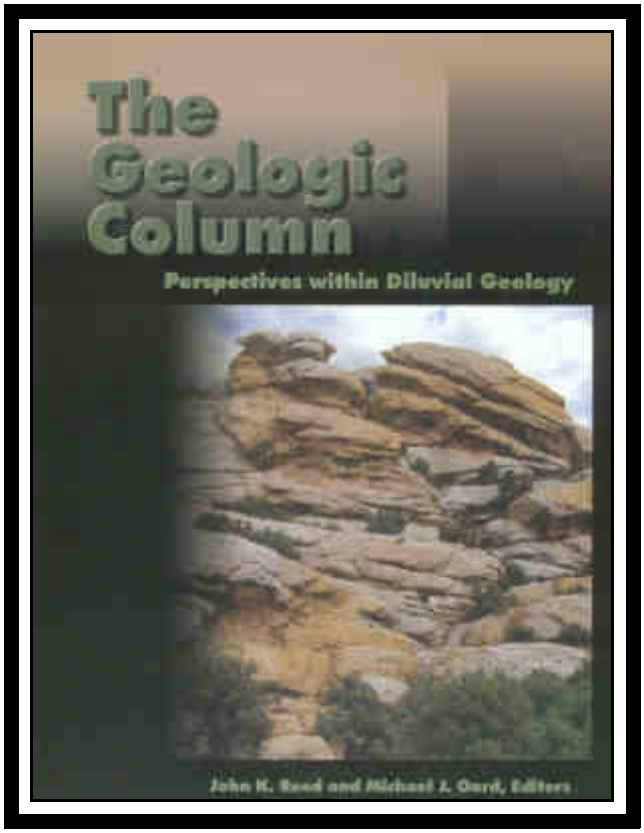
Evenings at the dig featured lessons in biblical creation, taught by Tom DeRosa. Tom's sessions dealt with dinosaurs, Darwinism, the ice age, the global flood of Noah, and evidence for a young earth. Despite the fact that almost 150 years of evolutionary science have failed to prove Darwin's theory, it's clear that evolution remains one of the greatest enemies of biblical Christianity in our time. Quoting evolutionist Niles Eldridge, Tom shared the observation that: "Darwin did more to secularize the Western world than any other thinker in human history." He challenged everyone to be actively engaged in the battle, not only for their own benefit, but in the interests of the wider world "out there."

Contact information

FACT will continue to offer dinosaur digs in conjunction with creation groups like CSI, or to any interested believers. Half-day rates are $75; full days cost $100. For more information on FACT's museum or digs, visit their web site at www.creationtruth.org.

CSI and Tom DeRosa are already making plans to hold two dino digs with FACT in 2007 and, of course, will continue to offer a slate of fossil floats as usual. To schedule Tom DeRosa to speak, to learn more about the Creation Studies Institute, or to sign-up for one of their fossil outings, go to www.creationstudies.org.

T.P. Beh is a freelance writer with an avid interest in geology, paleontology, and creation science. He lives in Castle Rock, Colorado with his wife and two children.



The Geologic Column
Perspectives within Diluvial Geology

John K. Reed and Michael J. Oard, Editors
2006. Creation Research Society, 157 pages.

$15.00
(plus $4.00 shipping and handling)

Many wonder how the evolutionary/uniformitarian geologic column fits into diluvial geology. At present, there is a remarkable diversity of original thought on this subject. Recent exchanges in the creationist literature show a tendency for various participants to talk past one another. This book has brought these different perspectives together with two goals: 1) to better define the real differences within diluvial geology, and 2) to identify the concrete issues that will provide a basis for continued research and, hopefully, future resolution.

The editors went one step further by providing, at the end of most chapters, a forum with comments and responses. In addition to the editors, the other authors are: Terry Mortenson, Peter Klevberg, Carl Froede Jr., David J. Tyler, Harold G. Coffin, and Emil Silvestru. Though it may be difficult to visualize now, diluvial geology represents a major paradigm shift that holds the potential to stimulate a revolution within the earth sciences.

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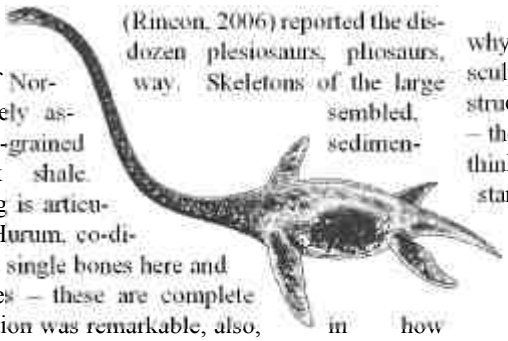
Speaking of Science

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.

Sea Monster Fossils Found in Arctic



The *BBC News* (Rincon, 2006) reported the discovery of over two dozen plesiosaurs, pliosaurs, and ichthyosaurs north of Norway. Skeletons of the large marine reptiles, completely assembled, were found buried in fine-grained sedimentary layers of black shale. "Everything we're finding is articulated," said Jorn Harald Hurum, co-director of the dig. "It's not single bones here and there, and bits and pieces – these are complete skeletons." The preservation was remarkable, also, in how fresh they looked, "like roadkill," a bleached white against the black of the shale. "Something happened with the chemistry that's really good for bone preservation," Dr. Hurum said.

Plesiosaurs and ichthyosaurs lived in the age of dinosaurs and went extinct at the same time. Hurum "was taken aback by the sheer density of fossil remains in one area," the article said. Hurum told the BBC, "You can't walk for more than 100m without finding a skeleton. That's amazing anywhere in the world." Another said, "These sites are very unusual. To find that many individuals is a remarkable thing – that's a bonanza." One of the specimens, which they nicknamed "the Monster," may be 26 feet in length.

It is speculated that these large creatures calmly died and sank to the bottom of the sea, where they were slowly buried. Would not bacteria and predators have devoured any trace of them? And even if the bones remained, would they not have disarticulated and spread apart? They must have been buried suddenly at the same time. Like so many other fossil graveyards, this area tells a silent tale of catastrophe.

Rincon, P. 2006. 'Monster' fossil find in Arctic. *BBC News, bbc.co.uk*, posted 7 October. http://news.bbc.co.uk/1/hi/sci/tech/5403570.stm

More Reasons Why DNA Is Perfect for Coding

Scientists at Vanderbilt University may have been trying to explain chemical evolution, but they hit on another reason DNA is the ideal molecule for carrying genetic information (Marino, 2006; see also Anonymous, 2006). They tweaked the sugar molecule on the DNA backbone and got an unwieldy, haphazard, writhing ribbon of a molecule, unsuitable for bonding genetic code or compacting into chromosomes. It wasn't even close to DNA. "**Just how nature arrived** at this molecule and its sister molecule, RNA, remains one of the **greatest** – and **potentially unsolvable** – **scientific mysteries**," the article says (emphasis added).

Martin Egli and team coaxed DNA to incorporate six-carbon sugars instead of the less-common five-carbon sugars (deoxyribose in DNA, and ribose in RNA). What they got is called homo-DNA. Though first synthesized in 1992, homo-DNA had not been studied in structural detail till now. Despite being thermodynamically more favorable for spontaneous formation, homo-DNA is too bulky, and too careless in its base pairing, to be useful as a genetic molecule. Furthermore, it cannot pair with other molecules like RNA – essential for transcription and translation.

These researchers did worthwhile work helping us understand why DNA is so good, seemingly "the work of an accomplished sculptor" as well as programmer. "The new insights provided by this structure lie at the heart of the most fundamental of scientific inquiries – the origin of life on Earth," they said. That's a worthy question to think about, even if it is an "unsolvable" mystery from a materialist standpoint. But the press release easily wins *Stupid Evolution Quote of the Week* for these groaners (quotes from press release, with emphasis added):

> DNA's **simple and elegant structure** – the "twisted ladder," with sugar-phosphate chains making up the "rails," and with oxygen- and nitrogen-containing chemical the "rungs," **tenuously** uniting the two halves – **seems to be the work of an accomplished sculptor**. … **Yet the graceful, sinuous profile of the DNA double helix is the result of random chemical reactions in a simmering, primordial stew.**
>
> "These molecules **are the result of evolution**," said Egli, professor of Biochemistry. "**Somehow** they have been **shaped** and **optimized** for a **particular purpose**."
>
> "Homo-DNA is just one alternative system. There are hundreds of sugars, as many as you can think of. It will be almost impossible to look at all of them," Egli said. … "But the big red herring of this work **could be that nature never went through these other sugars**. Maybe it **just hit on gold** (these five-carbon sugars) very **early** and **took off from there.**"

This shows that even misguided evolutionary scientists, though hopeless gamblers, are not completely out of touch with reality. Like the blindfolded, they occasionally bump into it and bang their heads. Nobody is forcing them to wear the blindfolds.

Anonymous. 2006. Uncovering DNA's 'Sweet' Secret. *Science Daily*, posted October 3. www.sciencedaily.com/releases/2006/10/061003143520.htm

Marino, M. 2006. Investigator seeks to uncover roots of DNA's 'sweet' secret. *The Reporter* (Vanderbilt Medical Center), posted September 29. www.mc.vanderbilt.edu/reporter/index.html?ID=5043

New Media Challenges Darwinism

Websites and resources challenging Darwinian dominance are springing up all over the place. Uncensored by scientific societies, they may be having more of an effect than evolutionary biologists wish to consider. Many are aimed at students and young adults.

- *Overwhelming Evidence* is an ID website aimed at high school students. It has blogs, forums and opportunities to get involved. www.overwhelmingevidence.com/

- *Salvo Magazine* is a new magazine devoted to cultural and scientific issues related to origins and the meaning of life. Its snazzy interface and cutting-edge, no-holds-barred approach is

aimed at the tastes of knowledgeable young adults.
www.salvomag.com/

- *Darwinism and ID* has a wacky website featuring the new book by Jonathan Wells, *The Politically Incorrect Guide to Darwinism and Intelligent Design*.
www.darwinismandid.com/

- Blogs like *GlobeLens* are too numerous to mention, in this day of personal publishing.
http://globelens.com/

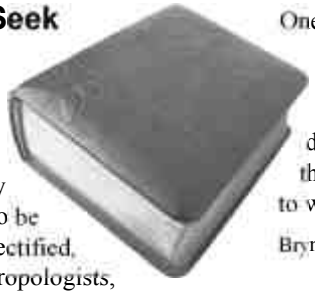
- *Life's Story* volume II, from Exploration Films, is due for release in mid-October.
www.explorationfilms.com/exploration-films-life-story.html

- Lee Strobel's best seller *The Case for a Creator* is expected to come out in a film version soon.
http://leestrobel.com/

- Randy Olson's zany attempt at a balanced film, *Flock of Dodos*, is still making its rounds, according to its October newsletter. But with the most-touted reviews coming from radical pro-Darwin groups like Pharyngula, it's not clear whether any Darwin critics are watching the "latest droppings from the 'Flock of Dodos' circus" or dodging them.
http://flockofdodos.com/
http://flockofdodos.zawaye.com/october/

The hardened Old Guard of the Darwin Party has shown itself incorrigible too long. Welcome to a new generation of critical thinkers who don't have to be force-fed the Darwin Brand Snake Oil, but know what's good for them and can read the bottles for themselves.

Evolutionary Anthropologists Seek to Study Christianity



According to a press release on *EurekAlert* (Anonymous, 2006), "Anthropologists have almost no track record of studying Christianity, a religion they have generally treated as not exotic enough to be of interest." This omission needs to be rectified, says Joel Robbins (UC San Diego): "Anthropologists, who are specialists in the study of religion outside the West, ought to be in the forefront of studying global Christianity and its impact," he said.

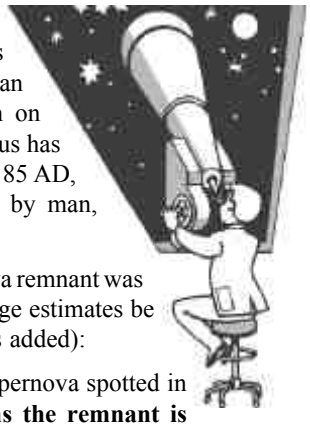
Robbins noted the difference in outlook between anthropologists and Christians. Anthropologists stress continuity and change over time, whereas Christians focus on radical discontinuities, such as the birth and second coming of Jesus, and the individual experience of conversion. "One does not evolve into a convert," he said.

That's right; conversion is a miraculous transformation begun by repentance from sin and faith in the miraculous resurrection of Messiah. These are inexplicable by an evolutionary process. Did you notice that the anthropologist's innate bias at looking for continuity and evolution will color his or her perception of the subject?

Explain Paul by evolution, Dr. Robbins. Tell you what; we'll let you analyze C.S. Lewis as an anthropological subject, if you will let him analyze you, in return, as a theological subject (an approach Lewis used, at length, in his writings). Beware, though; he could undermine your operational presuppositions by showing them to be theologically based. It could be an interesting contest: the survival of the wittiest.

Anonymous. 2006. The Anthropology of Christianity: Continuity thinking and the problem of Christian culture. *EurekAlert*, posted 2 October.
www.eurekalert.org/pub_releases/2006-10/uocp-tao100206.php

Supernova 80% Younger Than Previously Thought



The age of a supernova remnant has dropped from 10,000 years to less than 2,000 years. According to a news item on *Space.com*, the object RCW 86 in Centaurus has been linked to sightings by the Chinese in 185 AD, making it the oldest supernova recorded by man, taking place 1821 years ago.

But astronomers thought this supernova remnant was 10,000 years old. How could the earlier age estimates be so far off? The article explains (emphasis added):

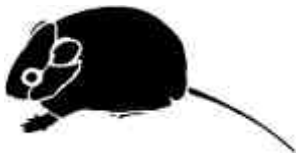
> The new age estimate matches the supernova spotted in 185 AD. But this calculation **means the remnant is 8,000 years younger than previously thought.** The astronomers said the **difference** can be **attributed** to the **irregular shape of the remnant's expanding bubble.** Stellar wind from the progenitor star pushed some of the remnant's gases in a certain direction, forming a dense pile. "The idea for RCW 86 is that in some regions the shock has hit this piled-up material. In those regions the shock will start moving slower," [Jacco] Vink [U of Utrecht] said. And in other regions, the shock wave is much speedier.

X-ray measurements from the Chandra X-ray Observatory were used in making the new age determination based on outflow speeds of the gas. The new estimate was about 2,000 years, within the range of the event in 185 AD.

One of the captions in the article was "Shell Shocked," but one wonders if this referred to the supernova remnant or to the astronomers finding out how wrong they had been. In this case, we had an observation to calibrate a dating method, and the result was drastically lower than predicted from theory. There are many other things in space and time that cannot be so calibrated. The parameter to watch in dating methods is the observation-to-assumption ratio.

Bryner, J. 2006. Astronomers find supernova first spotted 2,000 years ago. *Space.com*, posted 26 September.
www.space.com/scienceastronomy/060926_st_ancient_supernova.html

Voles Throw Evolutionary Genetics Into Disarray



What is it with voles? These little furballs with beady eyes, short tails, and tiny ears are giving evolutionary geneticists fits. A press release from Purdue University (Main, 2006; emphasis added) states, "Purdue University research has shown that the vole, a mouse-like rodent, is not only **the fastest evolving mammal**, but it also harbors a number of **puzzling genetic traits** that **challenge current scientific understanding**" and are "an **evolutionary enigma**" with "**many bizarre traits**," viz:

- Chromosome numbers range from 17 to 64 between species.
- X chromosomes in some species carry 20% of the genome.
- Some females carry significant parts of the male Y chromosome.
- In some species, the males and females have different chromosome numbers.
- Despite widely variant genotypes, all voles come out looking basically the same (phenotype). Some species look so

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Speaking of Science

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identical that it takes DNA analysis to tell the difference.

Why is this an *evolutionary* puzzle? "The study focuses on 60 species within the vole genus *Microtus*, which has evolved in the last 500,000 to 2 million years," the article says. "This means voles are evolving 60-100 times faster than the average vertebrate in terms of creating different species." It doesn't mean any such thing. It means, rather, that evolutionists are more incorrigible than ever when faced with conflicting data, to the point where they will believe in miracles.

These findings also mean that geneticists don't understand nearly as much as they had previously thought. How can you have vastly different genomes that yield identical-looking animals? What do genetic differences really imply about the fitness of individuals and populations? Why would a little furball evolve 100 times faster than an elephant, monkey, or whale, or rat or mouse?

Evolutionary theory was so much easier before we had facts.

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All by Design

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GRAND PROVISIONS

The Biblical viewpoint of life on Earth considers living things to have been designed according to different kinds by an all-knowing Creator, Who equips them with exactly the tools they need to survive.

One such example is a group of toads, the Bufo genus. Living on dry land poses the potential problem of dehydration, due to water loss through their thin skin. However, these toads possess remarkable means for making the most of available water.

One example of frogs in this genus is the Monte Verde Toad (golden toad), Bufo periglenes. *Photo, by Charles H. Smith, courtesy of U.S. Fish and Wildlife Service. Native to Costa Rica, this particular species is now thought to be extinct.*

First, they have a complex network of tiny grooves on the skin surface. If water touches the toad's skin, it will quickly distribute over the entire skin surface due to what are called "capillary forces." Secondly, these toads have a specialized area of skin on the lower abdomen designed for water absorption. This skin is thin and contains an elaborate network of small blood vessels.

If a toad becomes dehydrated and then encounters any moist surface, it will press this patch of skin against that surface. Special receptors in the skin are sensitized by dehydration and, if exposed to water, trigger a rapid, 600% increased blood flow to this area, helping the toad to absorb water directly through its skin. A hormone called arginine vasotocin is also released during dehydration, triggering increased water permeability in this patch of skin, helping the toad make use of any water it encounters in its environment.

This example highlights the perfect, intricate design of living things, pointing to a planned creation, not to the blind chance of evolution.

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