

Disclosure

of things evolutionists don't want you to know

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ASTRONOMY AND EVOLUTION

We don't write much about astronomy because it is only tangentially related to the theory of evolution—but there is a relationship that shouldn't be ignored.

Usually we like to write essays that are well-structured, linear arguments that build point upon point up to the compelling, undeniable conclusion. This month, for a change, let's just ramble on and on, with tongue in cheek, in an apparently pointless discussion that culminates in a surprisingly unexpected conclusion.

ASTRONOMERS, PLEASE DON'T STRIKE!

The Hollywood writers have been on strike for more than two months, proving that if you thought TV shows could not get any worse, you were wrong. Americans are currently suffering terribly from a lack of good television. ☺

Seriously, there have been other strikes that really have had devastating effects. It has been a long time since the New York City garbage men went on strike; but the effects of that strike have not been forgotten. From time to time there have been trucker strikes that caused bare grocery store shelves. We really suffered from those strikes. But **can you imagine how terribly it would affect your life if the astronomers went on strike?** ☺

Despite the fact that striking astronomers would not bring our economy to its knees in a matter of days, **astronomy has historically been at the foundation of great civilizations**, so astronomy must really be important. Aztecs had astronomers. Babylonians had astronomers. Egyptians had astronomers.

Those ancient civilizations needed to know when to plant their crops, and when to expect the

Nile River to flood. Astronomers were the ones who knew when the seasons began and ended. But **now that everyone knows how to count to 365, do we still need astronomers?**

THE ALL-IMPORTANT QUESTION

Astronomers are all searching for the answer to one all-important question, **"How can I get paid to take pictures with my telescope?"** If you ignore the obvious answer ("Point it at Brittany Spears' bedroom window."), it becomes a difficult question to answer. You can only sell so many posters of the Crab Nebula.

Therefore, **astronomers today have to make money the same way as they have throughout all of recorded history—they have to become priests.** In ancient times, astronomers used their knowledge of solar and lunar eclipses as a way to gain power. By being able to predict an eclipse, they could try to convince people that they had power over the sun and moon. Or, they could try to convince people that they were so close to the gods that the gods told them about the eclipses in advance. Maybe all they wanted to do was to prove they were smarter than everybody else because they were the only ones who knew when it would happen. In any case, **they used their knowledge of astronomy to get power over the people.**

It is really amazing when you stop to think about it. If you listed all the important events in your life, a lunar eclipse probably would not be anywhere near the top of that list. But the ability

to predict eclipses gave ancient astronomers power and respect.

Today, astronomers need to make their work somehow relevant to religion to give themselves importance and power. That's exactly what they have done by "detecting" planets outside our solar system (exoplanets).

EXOPLANETS

I believe there are lots of planets outside our solar system. There are probably more stars with planets around them than there are stars without planets. But I don't believe we have the technology today to be able to detect them. That's based on a lifetime of work in the defense industry designing things that detect targets. I know the limits of technology.

The difference between an engineer and an astronomer is that an engineer is in the enviable position of being able to test his instrument in ways that an astronomer cannot. We engineers can put a one-square-meter target at a fixed distance, look at it with our instrument, and see how big our instrument thinks it is. That allows us to determine if our instrument is telling us the truth or not. An astronomer is forced to point his telescope at a star he thinks is a certain size, that he thinks is shining with a certain intensity, that he thinks is a certain distance away, through a certain amount of space that he thinks is empty, to calibrate it. If his assumptions are wrong, the calibration is worthless.

The astronomer makes measurements and draws conclusions based on his assumptions. Nobody can prove his conclusions are incorrect without making different assumptions. "Truth" is determined by who can tell the most convincing story. So here is some advice for all you astronomy students who want to be successful—take as many debate classes as you can. A couple of drama electives would help, too. (No smiley face here. We are deadly serious.)

So, you are an astronomer. You need something more impressive than a close-up picture of the moon to get your funding next year. What do you do? You find a star and study it for a while, looking for something you can use. Maybe it has a periodic change in brightness. If so, you could argue that the star gets darker as its planet passes between us and the star. Maybe the star changes color ever so slightly periodically. That could be due to Doppler shift as the star wobbles because a heavy planet is circling it. You make some assumptions about the mass of the star and its distance, and then calculate the size of a planet necessary to produce the observed effect, and you have discovered a planet!

Okay. You've discovered a planet on a star so far away that nobody could ever reach it in a million lifetimes of traveling in a rocket with any practical speed and fuel capacity. Why would anybody care? How can you make it relevant to religion, and therefore make it worth paying for?

There are some people who believe (by faith) that anywhere the environmental conditions permit life, life will spontaneously originate and evolve. They believe that given enough time, simple life will evolve into intelligent life. If that really is how intelligent life came to be, then there is no absolute morality, no judgment against that absolute moral standard, and no punishment for failing to live up to that moral standard. Some people will pay dearly for confirmation of their belief.

Since all attempts to find life on planets in our solar system (other than on Earth itself) have failed, those people need to find life on planets outside our solar system. The "discovery" of planets outside the solar system is the first step to finding life on those planets. The next step the astronomers will take is to find evidence that some of those planets have conditions that would permit life to exist. Then there will be some discovery that shows life really does exist on those planets.

The ultimate goal is to actually make contact with intelligent life outside our solar system. They want to do that because they want to ask those alien life-forms some pointed questions. They expect the answers to those questions to be, "Jesus of where? Death on a cross? What are you talking about?"

That's why they give money to the Planetary Society, and SETI, and the AAAS, and any other group that will lobby NASA and the U.S. Congress to fund the search for extraterrestrial life. Astronomers will publish discoveries that tend to keep the hope of extraterrestrial life alive in order to keep funding alive.

THE IRONY OF IT ALL

Ironically, although evolutionists desperately want to make contact with advanced, intelligent life from outer space, they adamantly deny reports that we have already been visited by heavenly messengers. They believe more advanced intelligent life forms exist in outer space, but they don't believe there are angels in heaven.

You are permitted (even encouraged) to copy and distribute this newsletter.

INDIAN WHALES

Here's another new fable about the ancestry of whales.

The December 20, 2007, issue of *Nature* contained an article claiming that “Whales originated from aquatic artiodactyls in the Eocene epoch of India.” The story must have been spoon-fed to certain reporters in advance because several people sent us links to various news stories about the article before we received our issue of *Nature* in the mail. We aren't convinced that those reporters read or understood the *Nature* article. They simply reported it as new proof of evolution.

We have previously explained the problems evolutionists have with whale evolution.^{1, 2, 3, 4} Here is a summary of the evolutionists' problem in the words of an evolutionist.

Phylogenetic analyses of molecular data on extant animals strongly support the notion that hippopotamids are the closest relatives of cetaceans (whales, dolphins and porpoises). In spite of this, it is unlikely that the two groups are closely related when extant and extinct artiodactyls are analysed, for the simple reason that cetaceans originated about 50 million years (Myr) ago in south Asia, whereas the family Hippopotamidae is only 15 Myr old, and the first hippopotamids to be recorded in Asia are only 6 Myr old. However, analyses of fossil clades have not resolved the issue of cetacean relations. Proposed sister groups ranged from the entire artiodactyl order, to the extinct early ungulates mesonychians, to an anthracotheroid clade (which included hippopotamids), to weakly supporting hippopotamids (to the exclusion of anthracotheres).⁵

Let's translate that paragraph into plain English. The DNA of whales is most like the DNA of hippos. Therefore, the molecular biologists say whales must have evolved from an early hippopotamus. Paleontologists don't buy that argument because they think the oldest whale fossils are 50 million years old, and the oldest hippo fossils are just 15 million years old. If

whales preceded hippos by 35 million years, they could not have evolved from them. But the fossil record has “not resolved the issue of cetacean relations” either. So, there are several different proposed whale ancestors.

This new study supposedly solves all the problems. We were somewhat confused, however, by this summary of the article, written by the editor of *Nature*.

The first ten million years of whale evolution are well documented in the fossil record, but their emergence from their terrestrial ancestors remains obscure. A new study points to the raoellids — small, primitive even-toed ungulates (artiodactyls) from India — as the closest known relatives of the early whales. The raoellid *Indohyus* is similar to whales, and unlike other artiodactyls, in the structure of its ears and premolars, in the thickness of its bones and in the isotopic composition of its teeth. These indicators suggest that this raccoon-sized creature spent much of its time in water. Typical raoellids, though, had a very un-whale-like diet, suggesting that the spur to take to the water may have been dietary change, rather than the lure of the aquatic habit *per se*.⁶

Presumably the first 10 million years of whale evolution would consist primarily of the evolution from land to water. If those 10 million years are so well documented, why is their origin still obscure? Apparently the phrase “well documented” means different things to different people. *Indohyus* is similar to whales in the shape of its premolars (teeth), but its diet (which is generally inferred from the shape of the teeth) was “very un-whale-like.” The thinking process of the editor of *Nature* apparently goes something like this: Spending time in the water will make a land animal more fishlike; the reason to spend more time in the water is to get more food; therefore, it must have acquired a taste for seafood, which made it evolve into a whale.

What is it about the *Indohyus* skull that makes it like a whale? Well, there are certain similarities.

Indohyus shares with cetaceans several synapomorphies that are not present in other artiodactyls. Most significantly, *Indohyus* has a thickened medial lip of its auditory bulla, the involucrum (Figs 1 and 3), a feature previously thought to be present exclusively in cetaceans. Involucrum size varies among cetaceans, but the relative thickness of medial and lateral walls of the tympanic of *Indohyus* is clearly within the range of that of cetaceans and is well

¹ Disclosure, August 1999, “In a Whale of Trouble”

² Disclosure, November 2001, “Whale Tale Two”

³ Disclosure, September 2003, “What is a Whale?”

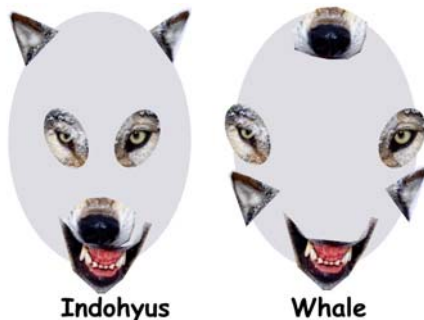
⁴ Disclosure, December 2006, “Whale Brains”

⁵ Thewissen, *et al.*, *Nature*, 20 December 2007, “Whales originated from aquatic artiodactyls in the Eocene epoch of India”

⁶ *Nature*, 20 December 2007, “The backstory on whales” page xi

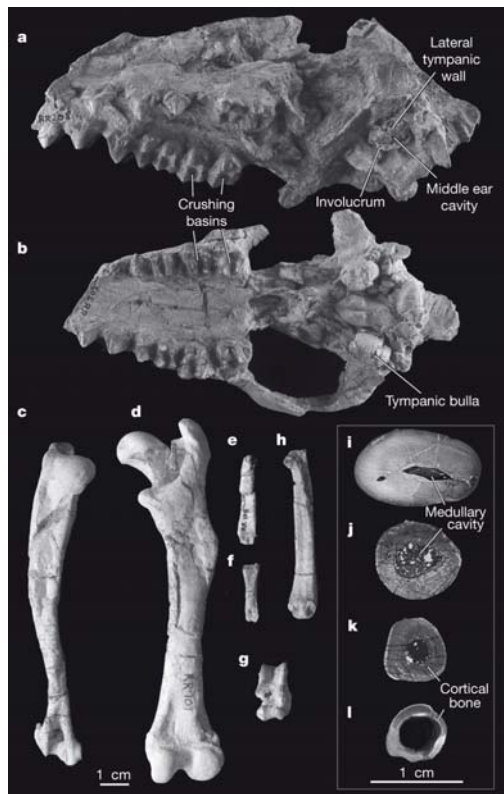
outside the range of other cetartiodactyls (Fig. 3). Other significant derived similarities between *Indohyus* and cetaceans include the anteroposterior arrangement of incisors in the jaw, and the high crowns in the posterior premolars.

We should point out there are some differences that we think are significant. *Indohyus* has a nose at the front of its skull, near its mouth. Whales have their noses at the back of their skulls. *Indohyus* has closely set eyes in the center of its face. Whales have eyes on the sides of their heads. *Indohyus* has ears on the top of its skull. Whales have ears on the sides of their skulls. The differences are clearly shown below.



But what are those differences compared to the relative thickness of medial and lateral walls of the tympanic? ☺ How foolish it is of us not to see the similarity between *Indohyus* and a whale!

All kidding aside, here are the bones they analyzed:



The fossils consist of a skull and a few pieces of leg bones. What would make anyone believe these bones have anything to do with a whale? Well, here's their argument.

All fossil and recent cetaceans differ from most other mammals in the reduction of crushing basins on their teeth: there are no trigonid and talonid basins in the lower molars, and the trigon basin of the upper molars is very small (for example in pakicetids and ambuloctetids) or absent. Crushing basins are large in raoellids (Fig. 1a, b) and other basal ungulates. This implies that a major change in dental function occurred at the origin of cetaceans, probably related to dietary change at the origin.⁷

Their conclusion is based on teeth. They say that all living and fossil whales have small crushing basins on their teeth. Therefore, one would reasonably expect that *Indohyus* also had small crushing basins, which is what would make them think *Indohyus* was a whale ancestor. But they say it had large crushing basins! *Indohyus* had significantly different teeth than whales have. But rather than conclude that *Indohyus* was not a whale, they say, "This implies that a major change in dental function occurred at the origin of cetaceans, probably related to dietary change at the origin." What they are basically saying is that *Indohyus* must have been a whale ancestor because its teeth are NOT whale-like, which is proof that the shape of whale teeth evolved! But it gets better!

Consumers foraging within food webs fuelled by freshwater phytoplankton (for example freshwater and brackish-water foraging Eocene whales) typically have lower $\delta^{13}\text{C}$ values than species foraging on aquatic macrophytes or on terrestrial resources (Fig. 4). Enamel $\delta^{13}\text{C}$ values for *Indohyus* are higher than those for most early cetaceans and are most similar to the $\delta^{13}\text{C}$ values in enamel for terrestrial mammals from early and middle Eocene deposits in India and Pakistan. *Indohyus* could have been feeding on land or in water, but it was clearly eating something different from archaeocetes such as *Pakicetus* and *Ambulocetus*. If the large crushing basins in the molars of *Indohyus* were used for processing vegetation, these $\delta^{13}\text{C}$ values in enamel could come from the ingestion of terrestrial plants or aquatic macrophytes. Alternatively, a more omnivorous diet would suggest that *Indohyus* might have foraged on benthic, aquatic

⁷ Thewissen, *et al.*, *Nature*, 20 December 2007, "Whales originated from aquatic artiodactyls in the Eocene epoch of India"

invertebrates in freshwater systems. Although we cannot exclude the possibility of aquatic foraging by *Indohyus*, $\delta^{13}\text{C}$ values in enamel do suggest that the diet of *Indohyus* differed significantly from that of Eocene whales. A more refined interpretation of the dietary preferences of *Indohyus* will require a study of tooth wear and tooth morphology.⁸

In plain English, an analysis of the amount of carbon 13 in the teeth indicates that it fed on land rather than in the water. So, there is even more evidence that it was not a whale.

We loved the last line in the previous quote. ("A more refined interpretation of the dietary preferences of *Indohyus* will require a study of tooth wear and tooth morphology.") No scientific report would be complete without a justification for more money for research! ☺

Here is their "working hypothesis."

Our working hypothesis for the origin of whales is that raoellid ancestors, although herbivores or omnivores on land, took to fresh water in times of danger. Aquatic habits were increased in *Indohyus* (as suggested by osteosclerosis and oxygen isotopes), although it did not necessarily have an aquatic diet (as suggested by carbon isotopes). Cetaceans originated from an *Indohyus*-like ancestor and switched to a diet of aquatic prey. Significant changes in the morphology of the teeth, the oral skeleton and the sense organs made cetaceans different from their ancestors and unique among mammals.⁹

They assume that the evolution from land to sea would require a change in diet. They found a land animal with a land-base diet, and consider that to be proof of their hypothesis. And they call that science. ☹.

Email

WHAT DO ENGINEERS KNOW?

Phillip answers Ken's question differently than we did.

Last month, we gave Ken some "grandfatherly advice" in response to his email asking what engineers know about evolution. Phillip sent us a different answer.

Subject: Reply to Ken, PhD candidate...
From: Phillip
Date: Wed, 26 Dec 2007

Dear Do While,

I read Ken's email and your reply in the December 2007 monthly email page.

I would like to reply to his question, as I think it is worth reflecting on the issue.

Below is my reply. I'd really appreciate if you could kindly forward it to him (you can include my email address). Alternatively, you can use it in your newsletter.

Thanks and best regards
Phillip

>>>>>>>

Ken,

You asked a pertinent question. Many other people are probably pondering over the same thing.

"What do engineers know about evolution anyway?"

Well, engineers know about how things work. They live in a world in which fancy theories are quickly put to the test by grim reality. And if it does not work, not only are they out of a job, but people may lose their lives.

Engineers understand, design and build complex systems in which thousands and thousands of components work together, and interact with different materials, fluids, chemicals, electromagnetic fields and waves, electrical currents, climatic conditions, temperature, pressure, and, and, and.

Trust me, when you cross a bridge or fly in an airliner you'd rather know for a fact that the people who designed and built it knew what they were doing, and were applying sound knowledge that has stood the test of real life.

Think carefully: if, as you board a plane, you were told "This is a brand new design, based on brand new information, the latest our best engineers with over a hundred years of experience in the field have come up with. We just redesigned it because all the previous aircraft we designed and built in the past 100 years ultimately crashed due to flaws in the information available, and in our understanding of that information. But this one IS the right design! Have a nice trip! " How exactly would you feel?

Next time you board a 747, look around. Try to figure out what it takes to keep over 300 tons of metal screaming across the sky, eight miles above ground, with a few hundred people inside. And ask yourself again: "What exactly do these guys know about how things work?"

So, what do engineers know about evolution? Or biology? Or paleontology? Or geology? Engineers understand how things work, what works, why it works, what does not work, and why it does not work. They have very little time for nonsense, and have an innate aversion for it.

You bet your life on it.
Think.
Phillip

⁸ *ibid.*

⁹ *ibid.*

by Lothar Janetzko

EVOLUTION NOT 'JUST A THEORY', AND YES, HUCKABEE IT DOES MATTER

<http://blog.wired.com/wiredscience/2008/01/evolution-is-no.html>

"Evolution is the central organizing principle of modern biology"

This month's web site review looks at a page on *Wired.com* under the section Wired Science. Since the 2008 presidential election is now fully underway, it did not take too long for the creation versus evolution debate to become an issue in the campaign. On this web page you will find a YouTube video of an interview between Mike Huckabee and Bill Maher. From the video you learn that three of ten Republicans during a debate raised their hands when asked if they did not believe in evolution. From the video you can immediately sense the bias of the media regarding questions about evolution. The web site article also reveals its bias by referring to a report of the National Academy of Sciences titled **Science, Evolution and Creationism**.

The web page wants you to believe that if you know anything about science you will know that the age of the earth is 4.5 billion years old. The really interesting part of this web page is the comments posted by various people regarding creation and evolution. Here you will find a wide range of ideas. Some comments evoke thoughtful responses and others just result in name calling.

I believe this web page shows just how important the Internet has become in allowing the exchange of ideas regarding creation and evolution. You can take an active part in the discussion or you can just read comments and decide for yourself what makes sense.

Disclosure

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P.O. Box 923
Ridgecrest, CA 93556

R. David Pogge, President, Editor
Andrew S. Ritchie, Vice President
Susan S. Pogge, Secretary/Treasurer
www.ScienceAgainstEvolution.org