

Disclosure

of things evolutionists don't want you to know

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SHALLOW THINKING

The theory of evolution certainly isn't rocket science.

I happened to see the movie *First Man* on the same day I read an article about how life allegedly evolved in shallow water, and I could not help but notice the difference between real science and the theory of evolution.

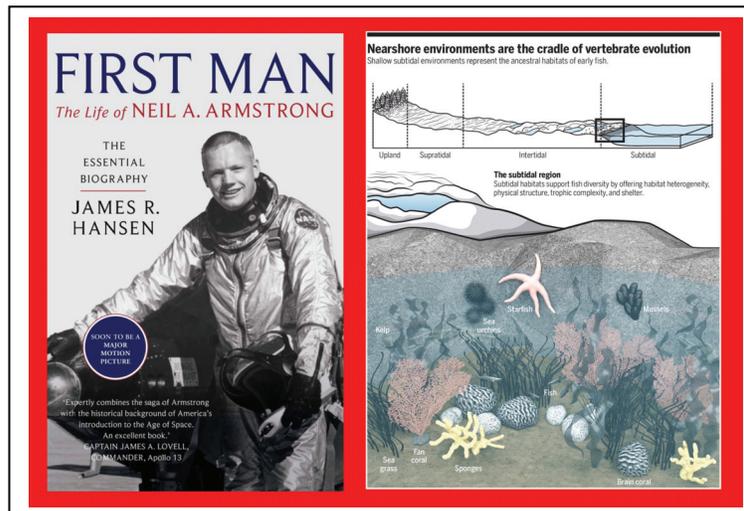
the first time two spacecrafts docked in orbit. Docking while in orbit illustrates the difference between the real science of the space program and the non-scientific theory of evolution.

FIRST MAN

Based on the book by James R. Hansen, the movie *First Man* portrays the life of Neil Armstrong from his days as a test pilot in 1961 through his return from the Moon in 1969. It isn't a movie you need to see on the big screen, but it is best if you hear it in a theater (or a home with a really loud surround-sound system)! When the rockets blast off, the sound makes your seat shake almost as much as if you were actually riding the rocket yourself.

Parts of the movie are actual footage from the 1960's that have been digitally restored to quality better than it was in the 60's. The other parts are recreations so historically accurate that it is hard to tell them from the actual footage. I could go on at length about the memories that film brought back to me, but let's skip right to the point.

Armstrong's "one small step for [a] man" was really the last of many small steps for NASA. Although he is best remembered for his flight on Apollo 11, one could argue that his Gemini 8 mission was actually a bigger step because it was



DOCKING

You may have seen a movie or TV show where an empty tractor-trailer truck is speeding down the highway and lowers its tailgate so a stuntman can drive a car up into it from behind for whatever reason the plot requires. Parking a car inside a trailer at high speed is dangerous, but theoretically simple. It isn't that simple in orbit.

If two orbiting spacecraft are going the same speed a short distance apart, the following

spacecraft can't just "step on the gas" to catch up and dock. Paradoxically, equations predicted that firing the rocket motor to go faster would actually make the craft go into a slower, higher orbit. The mission of Gemini 8 was to confirm that the equations were correct, and that spacecraft could dock in orbit if the following spacecraft "stepped on the brakes" to catch up to the one in front.

That's how real science works. There is an expected outcome, and an experiment is conducted to confirm the expectation. NASA got to the Moon by doing many carefully planned experiments confirming expectations about docking, walking in space, and so on, before

Apollo 11 went to the Moon.

If you aren't old enough to remember the first step on the Moon, you might wonder why (as the movie showed) Armstrong was very careful about taking that first step. Some people (at that time) thought that the Moon was about 2 billion years old, and was probably covered with billions of years of cosmic dust which could be dangerously thick and unstable. Many people (including Armstrong and creationists) were pleased to discover there was only a very thin layer of dust. People had differing expectations. That's why experiments are necessary to confirm or refute those expectations. The actual amount of dust on the Moon was not determined by the eloquence or prestige of the academics holding differing opinions.

SHALLOW WATER

Let's contrast the real science in a movie with the evolutionary "science" in a peer-reviewed science journal.

Late last month, an article appeared in the journal *Science* claiming that shallow water was the "cradle of early vertebrate diversification."¹ This article was so significant in the eyes of one of the editors of the journal that she had to add her own comments about it.²

Here is the premise: There are more different species of marine creatures in shallow water than there are in deep water. Therefore, all must have evolved in shallow water, and some moved to deep water later. Those are our words. Here are their words:

Abstract

Ancestral vertebrate habitats are subject to controversy and obscured by limited, often contradictory paleontological data. We assembled fossil vertebrate occurrence and habitat datasets spanning the middle Paleozoic (480 million to 360 million years ago) and found that early vertebrate clades, both jawed and jawless, originated in restricted, shallow intertidal-subtidal environments. Nearshore divergences gave rise to body plans with different dispersal abilities: Robust fishes shifted shoreward, whereas gracile groups moved seaward. Fresh waters were invaded repeatedly, but movement to deeper waters was contingent upon form and short-lived until the

later Devonian. Our results contrast with the onshore-offshore trends, reef-centered diversification, and mid-shelf clustering observed for benthic invertebrates. Nearshore origins for vertebrates may be linked to the demands of their mobility and may have influenced the structure of their early fossil record and diversification.³

The body of the article begins,

The ancestral habitat of vertebrates has long been debated, with opinions ranging from freshwater to open ocean habitats. Inferences have been derived from either the evolutionarily distant modern fauna or qualitative narratives based on select fossils. Early records of vertebrate divisions, such as jawed fishes and their relatives (total-group gnathostomes), consist of long gaps between inferred origination and definitive appearances (ghost lineages), punctuated by suggestive microfossils.⁴

Up until now (and, actually, still now) there has been a debate about where vertebrates evolved because all they have are inferences based on selected fossils with long gaps between them, and the belief in ghost lineages.

Here is how they believe they have ended the debate.

We applied Bayesian threshold models to phylogenies of occurrences using prior probabilities of residence in each benthic assemblage zone. This methodology allowed positive inference of both ancestral habitats and amount of evolutionary change required to move between zones ("liability" values).⁵

The article is filled with evidence like this:

Jawed and jawless fish distributions are highly clustered in BA0 to BA2 early in clade history ($n = 478$), in the Silurian and Lochkovian ($n = 1035$), and over the mid-Paleozoic ($n = 2147$) (Fig. 1 and figs. S1 and S16 to S18). We recover no significant or strong positive correlations between this gnathostome pattern and other fossil records (linear regression r^2 range: -0.90 to 0.27 , P range: 0.41 to 0.9) (Fig. 1B and fig. S16).⁶

Their paper consists of a statistical analysis of

¹ Sallan, *et al.*, *Science*, 26 Oct 2018, "The nearshore cradle of early vertebrate diversification", pp. 460-464, <http://science.sciencemag.org/content/362/6413/460>

² Pimiento, *Science*, 26 Oct 2018, "Our shallow-water origins", pp. 402-403,

<http://science.sciencemag.org/content/362/6413/402>

³ Sallan, *et al.*, *Science*, 26 Oct 2018, "The nearshore cradle of early vertebrate diversification", pp. 460-464, <http://science.sciencemag.org/content/362/6413/460>

⁴ *ibid.*

⁵ *ibid.*

⁶ *ibid.*

the different features in different kinds of sea creatures, combined with the researchers' inferred prior probabilities of residence. In other words, it is a statistical comparison of actual variation measured now, compared with presumed variations in the unobserved past, and an explanation of why the amount of variation changed. Their conclusions are nothing more than opinions about the meaning of unconfirmed computer models.

REAL SCIENCE

Here's how real science should work: **Step 1:** A scientist observes more different kinds of sea creatures in shallow water than deep water. That's a good starting point. Sallan and his associates began there, as they should.

Step 2 should be to ask, "Are there really more different kinds of sea creatures in shallow water, or does it simply appear that way because we haven't explored deep water as much as we have explored shallow water?" In other words, **is the observation accurate?** When James Cameron dove down to explore the Titanic, it took so long to get down he only had a short time to explore before he had to come back up. Deep-water biologists have the same problem. Deep-water environments haven't been observed as thoroughly as tide pools have.

In her analysis of Sallan's article, Pimiento said,

The examination of primary data on early fish (e.g., from the mid-Paleozoic) revealed that their fossil record accumulated in shallow waters. However, it has been recognized that **this might be an artifact of a poor fossil record**; in other words, the habitats from where ancient fish have been recovered might reflect outcrop (the exposure of rocks) availability rather than true origins. **Sallan *et al.* explicitly test this possibility** and demonstrate that although fossils of early fish are mostly are [*sic*] found in rocks coming from depths between 60 and 200 m, the early diversification of vertebrates was restricted to shallower environments of less than 60 m of depth. Accordingly, **the ancestral habitats of early fish are not a sampling artifact.**

We question the reliability of the way they tested the possibility; but **we give them credit** for trying and won't dispute their conclusion because we are discussing the scientific method, and **they used the correct method** regardless of the

⁷ Pimiento, *Science*, 26 Oct 2018, "Our shallow-water origins", pp. 402-403, <http://science.sciencemag.org/content/362/6413/402>

accuracy of the conclusion.

Step 3: Propose a hypothesis. Their hypothesis is that there is something about shallow water that is different from deep water that promoted diversity and caused evolution. OK.

Step 4: Propose a theory to explain the hypothesis. They did not do this.

They could have theorized that **sunlight causes evolution**, and less light penetrates the deeper the water. They could have theorized that **pressure or temperature inhibits evolution**, and the pressure is too high, or temperature is too cold at great depths. **They didn't propose any theoretical reason for the observation.**

Step 5: Devise experiments to test the theory. Of course, they didn't do this because **they didn't have a theory to test.**

If their theory was that **sunlight causes evolution**, they should have taken two identical aquariums of sea creatures, keeping one in a dark room and exposing the other to sunlight and see **in which aquarium more diversity happens.** Or, they should have taken two identical aquariums and put one in a high pressure chamber. Or, they should have taken two identical aquariums and kept one as cold as it is in deep water. Whatever they thought the cause was, they should have devised an experiment to test their theory.

Sallan didn't do that because he couldn't. **You can't compare the amount of evolution in an aquarium in a dark place to evolution in an aquarium in a sunny place because there won't be any evolution in either one. Macroevolution has never been observed anywhere because it has never happened.**

Instead, Sallan did lots of statistical analysis to compare the amount of variation in shallow water creatures to deep water creatures, and the amount of variation in shallow water fossils to deep water fossils. **That simply quantifies the amount of variation. It doesn't tell you anything about the cause of the variation, and doesn't prove that new species originated there.**

More people live in New York City than here in the Mojave Desert. That doesn't mean people evolved in New York City. I live in the Mojave Desert—but I wasn't born here. **Statistical differences don't prove anything about why or where those differences arose.**

POLITICS

We can't ignore the corrupting influence politics has on science, as seen in the last paragraph of Pimiento's commentary on Sallan's study.

Today, protected shallow-water ecosystems are not only biodiversity hotspots, but also serve as essential nurseries for fish (e.g., coral reefs, estuaries, and mangroves). These ecosystems offer physical structure, habitat heterogeneity, and trophic complexity, thus providing abundant food and refuge to marine fauna, as well as important services to humans. Nearshore systems have supported fish diversity for at least 66 million years. Sallan *et al.* not only extend this association to the very origins of vertebrates, but also highlight the role of shallow waters as a persistent cradle for their diversification. Nevertheless, just as these environments can support biodiversity, their reduction can also result in its loss. Between five and two million years ago, shallow-water habitats contracted as a result of dramatic sea-level oscillations, likely causing the extinction of a substantial number of marine vertebrates. Before these already-vulnerable organisms had time to recover, modern humans started degrading their (shallow-water) habitats by overexploiting their fauna and destroying the structure that provides the foundations of biodiversity. Sallan *et al.* show that without shallow-water ecosystems, vertebrates (humans included) would probably not have evolved. Worryingly, it is precisely these ecosystems that have been altered the most by human activities.

8

Pimiento is “worrying” that human activity is “destroying the structure that provides the foundations of biodiversity.” She thinks Sallan’s statistics prove she is right.

Ironically, she believes “between five and two million years ago, shallow-water habitats contracted,” despite the fact that there weren’t any humans causing global warming back then. Somehow, the climate changed before man messed it up. Furthermore, she thinks decreasing sea levels is bad. So, if global warming is causing the sea levels to rise, isn’t that a good thing? ☺

Email

SAM IS BACK!

Your favorite hater strikes again!

We first heard from Sam on May 6, 2014. He sent a series of emails back then, some of which we published^{9 10 11 12 13 14}, but we hadn’t heard

⁸ *ibid.*

⁹ *Disclosure*, June 2014, “Religion and Probability”, <http://scienceagainstevolution.info/v18i9e.htm>

from him for more than three years.

SAM’S PREVIOUS COMPLAINTS

Sam’s emails consist mostly of personal attacks, and attacks on religion. We have tried to get him to give us any example of anything we have written which is factually incorrect. In March, 2015, he had to go back to an essay¹⁵ we wrote in January of 2003 (twelve years before his email) to come up with something. Here’s a summary of that article:

In 2003, the newest “proof” that humans and apes evolved from a common ancestor was the “fact” that human DNA and ape DNA are 98% identical. This claim was based on a groundbreaking article by Fujiyama titled “Construction and Analysis of a Human-Chimpanzee Comparative Clone Map.”¹⁶ We quoted extensively from Fujiyama’s article and showed that when he described their method, he explained why they didn’t compare the whole genome. They compared just a few fractions of the human and ape genomes that were most similar. Based on his published numbers, we summarized Fujiyama’s results this way: “If you look at less than 1/100th of the total genome, you can find areas that are 98.77% similar!”

Sam didn’t object to any of that. Instead, he objected to the section of our analysis in which we admitted that there is a certain amount of genetic similarity between humans and other animals, but went on to argue that although similarity might be evidence of common ancestry, it could just as well be considered to be evidence of common design.

Perhaps in our original article we should have given an example showing that sometimes similarity really is the result of common ancestry. Some brothers look very much like each other even if they aren’t twins. On the other hand, some brothers don’t look anything like each other. Similarity isn’t always associated with common

¹⁰ *Disclosure*, July 2014, “June Newsletter Reactions”, <http://scienceagainstevolution.info/v18i10e.htm>

¹¹ *Disclosure*, February 2015, “Intentional Ignorance”, <http://www.scienceagainstevolution.info/v19i5e2.htm>

¹² *Disclosure*, March 2015, “Sam”, <http://scienceagainstevolution.info/v19i6e1.htm>

¹³ *Disclosure*, August 2015, “Who is Gullible?”, <http://scienceagainstevolution.info/v19i11e2.htm>

¹⁴ *Disclosure*, May 2016, “Sam the Parrot”, <http://scienceagainstevolution.info/v20i8e1.htm>

¹⁵ *Disclosure*, January 2003, “98% Chimp”, <http://scienceagainstevolution.info/v7i4f.htm>

¹⁶ Fujiyama, *Science*, 4 Jan 2002, “Construction and Analysis of a Human-Chimpanzee Comparative Clone Map”, <http://science.sciencemag.org/content/295/5552/131>

ancestry.

Instead, we chose to emphasize the fact that similarity isn't necessarily the result of common ancestry—it could be the result of common design. The example we used was the fact that whenever a fan belt is used to connect a motor to something, the motor is nearly always mounted using a bracket which allows the motor to be moved slightly so that the belt tension can be properly adjusted. Unrelated machines have a similar movable mounting bracket because it is the best way to tension a fan belt. Here's the point: When there is only one solution to a problem, all designers will be forced to converge on that single solution.

In the past 15 years, evolutionists have learned a lot more about DNA, and they are finding similar genes in species which clearly do not have a common ancestor. "Convergent evolution" is the excuse evolutionists now invoke to reconcile evolutionary predictions with contradictory biological observations.

Convergent evolution is the independent evolution of similar features in species of different lineages. Convergent evolution creates analogous structures that have similar form or function but were not present in the last common ancestor of those groups. The cladistic term for the same phenomenon is homoplasy. The recurrent evolution of flight is a classic example, as flying insects, birds, pterosaurs, and bats have independently evolved the useful capacity of flight. ... In morphology, analogous traits arise when different species live in similar ways and/or a similar environment, and so face the same environmental factors. When occupying similar ecological niches (that is, a distinctive way of life) similar problems can lead to similar solutions.¹⁷

In other words, if you look at survival as a problem to be solved, there are just a few limited ways to solve the problem of existence in a hostile world. Evolutionists believe random chance will converge on those few viable solutions because all other approaches fail. So, just as many unrelated designers use similar mounting brackets to make it possible to adjust the tension of a fan belt, evolutionists claim that many unrelated species accidentally evolved similar genes to perform a necessary survival skill. In those cases, similarity is not evidence of common ancestry. Convergent evolution really is no different from our mounting bracket analogy. The similarity is the result of necessity, not ancestry.

This begs the question, "Why is it wrong for us

to say similarity is not incontrovertible evidence of common ancestry if it isn't wrong for evolutionists to say the same thing?" The honest answer is, "Once an evolutionist admits that similarity isn't evidence for common ancestry, he has lost his primary argument for evolution."

Evolutionists try to have it both ways. When similarity confirms their prejudice, similarity is iron-clad proof of common ancestry. When similarity isn't consistent with their belief, it means nothing.

SAM'S MISSING BACKGROUND

Because Sam's latest email was so poorly written, it took us some time to figure out just what his complaint was. Before we show you his email, we have to provide the background that Sam failed to include so you will know what he is talking about.

Last month's essay on the *Hox* gene began with the premise, "It is commonly claimed that anyone who is anti-evolution is anti-science because many people equate 'evolution' with 'science.' That's a false equivalence because the theory of evolution is unscientific."¹⁸

The rest of our essay was an explanation of why we believe that, using a peer-reviewed article which told how some evolutionists "elucidate two long-standing problems in animal evolution: the ancient function of the homeobox (*Hox*) gene cluster, which has puzzled scientists for decades, and the centuries-old debate on the emergence of the segmented animal body."

We quoted long sections of that article, despite the fact that such long and boring quotations might cause readers to stop reading. We took that risk because we wanted to be fair, and to protect ourselves from criticism that we were taking little snippets of the article out of context to distort them. We made every effort to present their findings as clearly as possible.

Our conclusion was, "When scientists start with the presumption of evolution, they get distracted trying to figure out when in evolutionary history *Hox* genes evolved, how they evolved, and which species evolved from what other species. They wind up with unsolved relationships, notes of caution, caveats, and all sorts of speculation that has absolutely no value."

Speculation is not really science. Science discovers laws of nature using repeatable experiments which result in unambiguous conclusions—not speculation. That's why we say the unconfirmed speculation about evolution is not science. The fact that a scientist says it doesn't

¹⁷ https://en.wikipedia.org/wiki/Convergent_evolution

¹⁸ *Disclosure*, October 2018, "The *Hox* Example", <http://scienceagainstevolution.info/v23i1f.htm>

make it true, or even scientific.

SAM'S RESPONSE

Sam could have responded by giving an example of how we had misrepresented the *Hox* gene article; but he didn't because he could not. We didn't misrepresent it.

Sam could have responded by giving reasons for why he believes the theory of evolution is scientific; but he didn't do that, either.

In several of Sam's previous emails, he has brought up our "bracket example" of similarity being the result of convergent design, not common ancestry. He must really think it is a compelling argument, or else he would not keep attacking it.

Now, with all that background, here (finally) is Sam's response to last month's essay:

Typical garbage. "That's a false equivalence because the theory of evolution is unscientific." Says the clown that made an analogy (fake argument) between DNA and brackets.

Here is something an actual creationist with real and relevant scientific credentials wrote:
<http://toddcwood.blogspot.com/2009/09/truth-about-evolution.html>

[Sam inserted the following quote from the link above at this point of his email:]

The truth about evolution
September 30, 2009
I hope this doesn't turn into a rant, but it might. You have been warned.
Evolution is not a theory in crisis.
It is not teetering on the verge of collapse. It has not failed as a scientific explanation. **There is evidence for evolution, gobs and gobs of it. It is not just speculation or a faith choice or an assumption or a religion. It is a productive framework for lots of biological research, and it has amazing explanatory power. There is no conspiracy to hide the truth about the failure of evolution. There has really been no failure of evolution as a scientific theory. It works, and it works well.**
I say these things not because I'm crazy or because I've "converted" to evolution. I say these things because they are true. I'm motivated this morning by reading yet another clueless, well-meaning person pompously declaring that evolution is a failure. People who say that are either unacquainted with the inner workings of science or unacquainted with the evidence for evolution. (Technically, they could also be deluded or lying, but that seems rather uncharitable to say. Oops.)
Creationist students, listen to me very carefully: **There is evidence for evolution, and evolution is an extremely successful scientific theory. That doesn't make it ultimately true, and it doesn't mean that there could not possibly be viable alternatives. It is**

my own faith choice to reject evolution, because I believe the Bible reveals true information about the history of the earth that is fundamentally incompatible with evolution. I am motivated to understand God's creation from what I believe to be a biblical, creationist perspective. Evolution itself is not flawed or without evidence. Please don't be duped into thinking that somehow evolution itself is a failure. Please don't idolize your own ability to reason. ...

[Sam's quote of the website ended there.]

What does some old has-been electrician know that he doesn't?
Learn a little humility, Pogge. You are out of your league.

Sam began by calling our article "typical garbage" without giving any reason why it is garbage—other than that it was written by someone who "made an analogy (fake argument) between DNA and brackets." In other unpublished emails we have asked him to explain why he thinks the bracket analogy is invalid, but he never has.

Because he could not explain in his own words why he believes evolution is not "a theory in crisis" (a claim that we did not make in the *Hox* article), he quoted a rant written 9 years ago by someone claiming to be a creationist. It is a "9-year-old rant" in more ways than one.

Wood's rant began, "Evolution is not a theory in crisis. It is not teetering on the verge of collapse. It has not failed as a scientific explanation. There is evidence for evolution, gobs and gobs of it." These are simply assertions with nothing to back them up. **If there really "is evidence for evolution, gobs and gobs of it," why not tell us what that evidence is?** The naked assertion, "Evolution is not a theory in crisis," is no more valid than the equally baseless assertion, "Evolution is a theory in crisis" (whatever that means). **The entire rant is fact-free.**

We tell you what we believe, and why we believe it, quoting current, peer-reviewed articles from respected scientific journals (and sometimes evolutionary nonsense from supermarket science tabloids, too).

Sam is a typical evolutionist who can't explain why he believes in evolution. It is his creation myth, which he accepts by faith. He just believes in evolution, and gets frustrated when we ask him to explain why he believes it because deep down inside he knows there is no good reason to believe it. Instead, he tries to change the subject by attacking all religions (which we choose not to print because his attacks are vile and irrelevant).

CREATION SCIENCE NETWORK

<http://www.creationproof.com/>

Creation Science Network is a non-profit organization dedicated to spreading the biblical and scientific truth of creation and a young earth.

This month's website review looks at the website of the Creation Science Network.

The Home page of the site presents the navigation links to all the material that can be found on this site and welcomes the reader to the Creation Science Network's Online Information Center. The site navigation links include: 1) Home; 2) Radio & Podcasts; 3) Library & Info Center; 4) Seminars/Workshops; 5) Support This Ministry; 6) Creation Store; 7) About Us; 8) Contact Us; and links to YouTube and Facebook that provide information about the Network.

From the Radio & Podcasts link you learn about the Creation Science Network's radio show, "Exploring God's Creation". This radio program airs in Portland, OR, Vancouver, WA, Denver, CO, and Phoenix, AZ. The links to listen to previous broadcasts don't seem to work, but you can order any of 12 CD's which each contain three shows.

The Library & Info Center link provides links to several articles where you can learn the truth about various topics such as the Creation Day, Fossil Evidence, Dinosaurs, Noah's Ark, Radio-Carbon Dating and more. Here you also learn about the book and DVD, The Truth About Creation & Evolution, by Bob Knopf. Links provide a sampling of the more than 75 facts found in the book and what book reviewers say about this book.

The About Us link provides the details about the Creation Science Network and includes: 1) Our Reason to Exist; 2) Mission Statement; and 3) Our Goals. Here you will also find a biographical sketch of Bob Knopf, the founder of the Network in 2004.

Although the site no longer appears to be active, there is much to explore. Just follow links that you find of interest. In following the Facebook link, I did determine that people are still posting comments on the Creation Science Network Facebook site. From an April 24, 2016 post you learn that "we are back from a hiatus, and will be posting here more regularly".



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