Disclosure

of things evolutionists don't want you to know

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The *Hox* Example

A recent article about the Hox gene shows how the theory of evolution is detrimental to science.

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.

Since it is not sufficient simply to claim that the theory of evolution is not only unscientific, but is harmful to science as well, it is necessary to give an example to substantiate the claim. So, we looked for an example in the first article about evolution we could find in the peer-reviewed journal, *Science*, which came in the mail today. It happened to be an article about *Hox* genes written by Shuonan He, and five of his associates.

In case you aren't familiar with *Hox* genes (and few people are) we will tease you a little bit to grab your interest.

> On page 1377 of this issue,[1] [Shuonan] He, *et al.*, 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. [2]

Before we talk about these two specific long-standing problems, one of which has puzzled scientists for decades, and the other which has been debated by scientists for centuries, let's establish some background.

[1] Shuonan He, *Science*, 28 Sep 2018, "An axial *Hox* code controls tissue segmentation and body patterning in *Nematostella vectensis*", pp. 1377-1380, http://science.sciencemag.org/content/361/6409/1377

[2] Detlev Arendt, *Science*, 28 Sep 2018, "*Hox* genes and body segmentation", pp. 1310-1311, http://science.sciencemag.org/content/361/6409/1310

Pure vs. Impure

A friend once told me the difference between a scientist and an engineer.

> When a scientist makes an important discovery, the first thing he thinks is, "Where can I get this published?" When an engineer makes an important discovery, the first thing he thinks is, "How can I make a buck with this?" [3]

Academia does pure, theoretical research. Private industry does impure, practical research. Both have their place.

Practical research has a goal in mind. For example, a pharmaceutical company recognizes a need to cure a particular disease and does research to figure out how to cure that disease. They hire many smart people and buy lots of expensive equipment to do the research. When they figure out how to cure it, they manufacture a medicine to cure that disease. They sell the medicine for much more than it costs to manufacture because they have to recover the research costs. In this way, the people who buy the drug to cure their disease bear the cost to discover the cure. If the pharmaceutical company didn't make a profit, they would go out of business and not find the cures for any more diseases.

Academic research doesn't have any goal in mind—other than to learn something new. The value in academic research comes from the fact that it is generally beneficial to know more about everything, and usually there will be a surprising payoff in the future which nobody could have predicted. Academic research is generally done by university professors who get paid through

[3] James L. Rieger

research grants from the government or wealthy philanthropic individuals.

Hox Genes

With the distinction between theoretical research and practical research in mind, let's consider the *Hox* gene research.

> *Hox* genes, a subset of homeotic genes, are a group of related genes that control the body plan of an embryo along the head-tail axis. After the embryonic segments have formed, the *Hox* proteins determine the type of appendages (*e.g.* legs, antennae, and wings in fruit flies) or the different types of vertebrae (in humans) that will form on a segment. *Hox* proteins thus confer segmental identity, but do not form the actual segments themselves.
>
> An analogy for the *Hox* genes can be made to the role of a play director that calls which scene the actors should carry out next. If the play director calls the scenes in the wrong order, the overall play will be presented in the wrong order. Similarly, mutations in the *Hox* genes can result in body parts and limbs in the wrong place along the body. Like a play director, the *Hox* genes do not act in the play or participate in limb formation themselves. [4]

There is no obvious, immediate application for *Hox* research. If many children were born with feet sticking out of their necks, then parents would gladly pay for prenatal tests to determine if their child would be born with a foot sticking out of his neck, and would gladly pay for a treatment to prevent it. Despite the fact that there isn't an immediate, pressing, obvious need that is compelling *Hox* gene research, the research is certainly well worth doing. *Hox* genes are found in just about every living thing, so it is important to learn all that we can about them. They hold fundamental secrets to embryonic development.

Starting Assumptions

You have to start somewhere when beginning any research. There are two obvious starting points. You can either start with the assumption that *Hox* genes are found in all forms of life because they existed in a common ancestor; or you can start with the assumption that *Hox* genes are found in all forms of life because they were created by a common designer. Which one you pick determines how the research will proceed.

In the following quote, you don't need to understand anything except the first sentence and the last sentence. The sentences in the middle are just there to show you how complicated the problem is, even if you don't understand a word of it.

> *Hox* genes were first discovered in flies and mice, where they specify different body segments along the anterior-posterior (A-P) axis. Although their expression often overlaps in posterior body regions, they show spatially distinct anterior expression boundaries. Importantly, the A-P sequence of *Hox* gene expression in the body matches their 3′ to 5′ sequential occurrence within a chromosome cluster, a principle called spatial collinearity. Moreover, the more anteriorly expressed 3′ *Hox* genes are often expressed earlier in development, which is called temporal collinearity. In addition, individual *Hox* proteins are typically active close to their anterior expression boundary, because the more 5′, or posterior, proteins counteract the function of the more 39, or anterior, ones whenever both products co-exist. This is called posterior prevalence.
>
> Making sense of these rules has been challenging. [5]

Comparing the *Hox* genes in flies and mice, scientists have noted similarities and differences having to do with where (spatial) and when (temporal) these genes do things (expression). Scientists have had (and still have) a hard time figuring out the genetic rules which determine when and where *Hox* genes are expressed.

Here is their explanation, which will read like gibberish followed by nonsense—but fear not, we will explain it.

> Few studies revealed *Hox* gene expression in mesodermal structures that resemble vertebrate somites. Moreover, *Hox* gene clusters are active in both segmented and unsegmented invertebrates such as sea urchins. This has prompted the view that the tight link between *Hox* genes and body segmentation observed in vertebrates, insects, or annelids has evolved independently, that is, by evolutionary convergence. [6]

They believe that because vertebrates (such as rabbits) insects (ants, for example) and annelids (earthworms) don't have a close common ancestor, these complicated *Hox* genes must have evolved independently. The technical name for this wishful thinking is "convergent evolution."

Those evolutionists who don't have the faith to

[4] https://en.wikipedia.org/wiki/Hox_gene, 4 October 2018

[5] Detlev Arendt, *Science*, 28 Sep 2018, "Hox genes and body segmentation", pp. 1310-1311, http://science.sciencemag.org/content/361/6409/1310

[6] *ibid.*

believe the unbelievable make this admission:

> The best way to challenge this view [convergent evolution] is to investigate an evolutionary outgroup. Accordingly, He *et al.* investigated *Hox* gene function in the cnidarian *Nematostella vectensis*, the starlet sea anemone. Cnidarians are our most distant relatives to possess a *Hox* cluster. Their inner surface is folded, so that their primitive gut is subdivided into chambers, called gastric pouches. These are also continuous with the lumen of the tentacles. The cnidarian lineage diverged from ours when a cluster of only three *Hox* genes existed, with one anterior (3′), one middle, and one posterior (5′) gene. The sea anemone has a fragmented version of the ancient three-gene *Hox* cluster, with additional, lineage-specific duplications. … [blah, blah, blah] … This is strong evidence that the link between *Hox* gene function and some kind of body segmentation is ancestral. But how does *N. vectensis* segmentation—the sequential generation of gastric pouches by epithelial folding—relate to bilaterian segmentation? … [blah, blah, blah] … One possible caveat is that the sequentially emerging *N. vectensis* folds are not generated from a posterior growth zone. This might represent a secondary simplification of cnidarian development, given that … [blah, blah, blah] … Examining the expression of *Hox* genes and of growth zone markers in these cnidarians could be especially rewarding, as it might establish a similar link between *Hox* spatial and temporal collinearity and the generation of body segments from a growth zone as is observed in vertebrates. Another note of caution concerns the unsolved axial relationships between cnidarians and bilaterians, which led to conflicting views about the nature of the cnidarian *Hox* axis. However, the data of He *et al.* seem to firmly settle this issue. [7]

The last sentence is priceless! All those weasel words were followed by the conclusion that the issue is now firmly settled!

Our Point

Thank you for sticking with us through all that technical detail in He's report. Here's the point in plain English:

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. It wastes the valuable time of brilliant scientists.

Scientists' time would be better spent trying to figure out how *Hox* genes work than trying to figure out how *Hox* genes evolved.

Not only is science against evolution, evolution is against science because it distracts scientists.

[7] *ibid.*

Evolution in the News

Directed Evolution

The 2018 Nobel Prize for Chemistry

We want to thank Steve for sending us this email suggesting the subject of this month's *Evolution in the News* article.

> I'm pretty sure you'll have something to say about the below:
>
> STOCKHOLM/LONDON, Oct 3 (Reuters) - Two Americans and a Briton won the 2018 Nobel Prize for Chemistry on Wednesday for harnessing the power of evolution to produce novel proteins used in everything from environmentally friendly detergents and biofuels to cancer drugs.
>
> "This year's Nobel Laureates in Chemistry have been inspired by the power of evolution and used the same principles – genetic change and selection – to develop proteins that solve mankind's chemical problems," the Royal Swedish Academy of Sciences said.
>
> Smith developed a method using a virus that infects bacteria to produce new proteins while Winter used the same phage display technique for the directed evolution of antibodies, with the aim of producing more effective medicines.
>
> "Directed" evolution?
> Steve

We get Steve's point, but it is subtle; so let's make the comment Steve wants us to make.

Smith and Winter had a goal in mind and consciously manipulated circumstances to develop proteins for an intended purpose. Yes, it was "evolution" in the sense that they changed something—but it wasn't "evolution" in the sense that undirected variation filtered by natural selection fortuitously resulted in a beneficial result. The "evolution" was an intelligent design.

They did not use the same principles as undirected evolution. They did not just sit idly by and watch as a virus just happened to infect a bacterium which fortunately caused the bacterium to produce a protein with a valuable property. It was intelligent design—not evolution.

Email

Flat-out Lies

Jonathan makes hit-and-run accusations.

After a long dry spell, we got some hate mail! It came from Jonathan on September 30. I think he might have written to us many years ago, but I could not find anything from him in our inadequate email archive. Here's what he wrote:

> Subject: Are you still around?
>
> If so, why is this website still up? Surely, if you've actually done any research at all, you know by now that most of what you say on "science against evolution" consists of flat-out lies. You deliberately omitted countless facts to invent nonsensical arguments against the existence of a highly observable process.

We gleefully replied,

> *Yes, we are still around, and are just about to start our 23rd year! We are still at http://scienceagainstevolution.info/index.shtml .*
> *Please send us some examples of "flat-out lies" from our website.*

Jonathan promptly replied,

> Everything. Every single thing you have claimed to be evidence against evolution is a conscious lie on your part. You misrepresent the laws of matter and energy, you claim that evolution is supposed to be "just random chance" as if animals magically "decided or realized" they could take certain forms. You know that isn't how it works. You know that it's a predictable pattern of genetic adaptation, no different from the selective breeding we ourselves use to alter animals and plants to our needs.

"Everything" is always the answer whenever we ask a critic for a specific example of any factual error we have ever printed. Since Jonathan can't give even one specific example of a flat-out lie, we suspect he has never even read a single one of our newsletters. He probably has been so brainwashed by evolutionists that he really believes our newsletters are nothing but flat-out lies, and hasn't bothered to read any of them. The only other possibility is that he has read them, but was not able to find a single lie in even one of our 264 past newsletters.

We again tried to get a factual response from him by writing,

> *Please give us a specific quote that is factually incorrect from one of our newsletters.*
> *We do not believe, and have never said anything remotely similar to, "evolution is supposed to be 'just random chance'" or "animals magically 'decided or realized' they could take certain forms". Are those conscious lies on your part? or do you have us confused with some other organization?*
> *Have you ever read any of our articles? Please read at least one article and point out any factual errors in it.*

As expected, we did not receive a reply. If Jonathan had bothered to read our newsletters he would have seen how wrong his characterization of our position is. We will address his false accusations anyway.

Evolution

There are many different definitions of evolution. The most basic definition is, "any kind of change." Of course, we believe things change. Automobiles certainly have evolved since the first Model-T Ford rolled off the assembly line. Babies become boys, who become teenagers, who become men, who become curmudgeons, but that change is not evolution—it is maturity.

We clearly defined the kind of evolution we are talking about at the top of the home page of our website.

> *When we talk about "evolution," we don't mean, "any kind of change." Nor do we mean minor variations that result from natural selection. We use the term "evolution" to mean,*
>
> ***"The doctrine that unguided natural forces caused chemicals to combine in such a way that life resulted; and that all living things have descended from that common ancestral form of life."***

Our website uses the users' default fonts and sizes; but our definition of evolution is written using the tag "FONT SIZE=+2" to make sure the definition appears two font sizes larger than normal. There is no mention of chance, magic, or volition in our definition.

Darwin believed that diet, exercise, and climate caused inheritable variations which were filtered by natural selection to produce new species. His observations that some physical characteristics can be modified by diet, exercise, and exposure to extreme climates were correct; but his presumption that these changes could be inherited was incorrect. Working out, or being a couch potato, will affect your body; but it will not affect the physique of any children you have.

The realization that diet, exercise, and climate cannot cause the inheritable variation necessary for evolution to take place caused evolutionists to replace Darwinian evolution with neo-Darwinian

evolution, in which random mutations caused inheritable differences.

Jonathan's criticism of random chance is applicable to neo-Darwinian evolution, which seems to be falling out of favor among evolutionists. We have to be cautious here because we don't have any statistical data upon which to make that statement. We can only say that, it appears to us as we read the technical literature that neo-Darwinian evolution seems no longer to be the consensus opinion.

We honestly don't know what the consensus replacement for neo-Darwinian evolution is these days. In August, 2013, we published Michelle Teague's review of the eight leading theories proposed by evolutionists to replace neo-Darwinian Evolution. [8]

More recently, we have seen some speculation by evolutionists that hybridization, or some kind of gene transfer between species is somehow responsible for the variation necessary for evolution. That seems to be the latest straw grasped by evolutionists. The obvious problem with this theory is that taking genetic information from a different species doesn't really explain the origin of new genetic information in the first place. It simply moves the problem to a different species. How did genetic information originate in that other species? Did it get the genetic information from yet another species? If so, where did that other species get the information? *ad infinitum*

Limits to Selection

Regardless of how the variation originated, there is some question among evolutionists as to whether or not natural selection is strong enough to cause a superior variation to drive the inferior variation to extinction. Is "survival of the fittest" really more powerful than "survival of the luckiest?" It isn't necessarily the slowest gazelle that wanders too close to the lion crouching in the tall grass.

Furthermore, it was Darwin's contention that small variations could accumulate without limit over time. We claim the data from the Kentucky Derby disproves Darwin's belief. [9]

Animal Volition

It is absolutely foolish to believe animals magically decided or realized they could take certain forms. We have never said that knowledgeable evolutionists believe this.

Some uninformed evolutionists (Jonathan, for example) might misunderstand Lamarckian evolution and think Lamarck believed that.

> He [Lamarck] gave as an imagined illustration the idea that when giraffes stretch their necks to reach leaves high in trees, they would strengthen and gradually lengthen their necks. These giraffes would then have offspring with slightly longer necks. … In essence, a change in the environment brings about change in "needs" (*besoins*), resulting in change in behavior, bringing change in organ usage and development, bringing change in form over time—and thus the gradual transmutation of the species. However, as historians of science such as Ghiselin and Gould have pointed out, these ideas were not original to Lamarck. [10]

This misunderstanding is understandable because if I say, "*J'ai besoin de* …" (literally, "I have need of …") most French interpreters would translate my words as, "I want …".

Lamarck didn't really believe the giraffe "wants" to be able to eat the leaves higher up on the tree, and wills his neck to get longer by stretching it; but the translation from French to English could be misconstrued.

Of course, plants don't have brains, so it is silly to think plants wanted their flowers to be more attractive to bees, and modified their shape or color accordingly.

We have never claimed evolutionists make these stupid claims. (But uninformed critics, like Jonathan, might want to believe we have.)

To Make it Perfectly Clear

Jonathan said we "claim that evolution is supposed to be 'just random chance' as if animals magically 'decided or realized' they could take certain forms." No, we don't.

We claim that evolutionists believe some unknown and unspecified natural process (perhaps, but not necessarily random chance) causes variations in individuals. Then, some unknown and unspecified natural process (perhaps, but not necessarily natural selection) causes a new trait to establish itself in a new population. We do not claim that evolutionists believe magic or conscious desires have anything to do with the process.

We also claim that the belief that unknown and unspecified natural forces caused life to evolve is not scientific, and that the preponderance of scientific evidence contradicts all the various theories of evolution.

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[8] *Disclosure*, August 2013, "In Search of 'Evolution 3.0'", http://scienceagainstevolution.info/v17i11f.htm

[9] *Disclosure*, June 1999, "The Kentucky Derby Limit", http://scienceagainstevolution.info/v3i9f.htm

[10] https://en.wikipedia.org/wiki/Lamarckism

Web Site of the Month – October 2018

by Lothar Janetzko

GENESISapologetics

https://genesisapologetics.com/

Non-profit organization committed to providing Biblically- and scientifically-based answers to evolution theory taught in public schools (in California)

This month's website review looks at a site whose mission is to provide "practical and easy-to-understand web, video, and written products for youth pastors, parents, and students" to answer questions regarding evolutionary theory taught to children during 6th, 7th, and 10th grades in public schools (in California).

At the top right of the main page of the site, the following links are provided: 1) Home; 2) About Us; 3) Events; 4) Testimonials; 5) FAQs; 6) Our Blog; and 7) Contact Us.

Below the title of the website, on the main page of the site, you will find the following links: 1) Junior High; 2) High School; 3) Store; 4) Can We Trust the Bible? 5) Debunking Evolution Series; 6) Events; 7) Resources; 8) Donations; and 9) Request a Talk.

Following the Junior High link, you learn that the GENESISapologetics ministry "has taken the time to read through some of the most common Junior High textbooks used in California public schools. All of these textbooks contain specific sections and materials that teach evolutionary theory. We provide informative rebuttals that support the beliefs of Christian students, teachers and parents and debunk the ideas presented in these books." The textbooks covered include books used for Social Study/World History and Life Science.

The High School link provides informative rebuttals to the many textbooks used to teach biology in California public schools. The suggestion is made to select the High School Biology book your teenager is currently using so you can answer questions he or she may have regarding the teaching of evolution found in the text. The rebuttals are presented by providing a Topic & Response. The Response is presented by providing a link to a YouTube video that you can watch. Selecting any of the YouTube videos you learn that "THIS VIDEO IS ONE OF TWELVE VIDEOS THAT COMPRISE A SIX-LESSON PROGRAM THAT CONTRASTS EVOLUTION WITH BIBLICAL CREATION and THIS PROGRAM (INCLUDING BOOK AND STUDENT GUIDE) CAN BE DOWNLOADED FREE FROM OUR WEBSITE."

Not only can you read the information of the website online, you can order a hard copy of various Packages or download the free Genesis Apologetics app from the Apple App Store or Google play.