OBJECT-ORIENTED CREATION: CLARIFICATIONS

Here is Tony’s response to our critique of his hypothesis.

Last month, Tony sent us an email in which he proposed an alternative to the theory of evolution. His idea was to analyze genetics from an object-oriented programming perspective, in which he proposed comparing the instructions coded in the DNA molecule and the instructions coded in a computer program. He asked us to critique his proposal, which we did.

We admitted that there were some parts of his proposal that we did not fully understand, and admitted that our comments were based on what we thought he meant, and that our understanding might not be entirely correct.

For the most part, our comments were based on a correct understanding—but there were a few points that Tony wanted to clarify.

LIMITED SOLUTION SPACE

Our understanding of Tony’s points 3 through 6 included this statement: “Tony seems to realize that the genes that produce lungs in one species should not be very much different from genes that produce lungs in any other species.” Tony’s response was,

#3-6 Also apply directly to protein creation and other biochemical factory products.

We didn’t mean to unfairly limit Tony’s observation to just lungs. We suggested the lungs as an example which we hoped would be easy to understand.

It is generally recognized by engineers that given any problem, there usually are only a few good solutions. Therefore, engineers often independently arrive at the same good solution to a particular problem. Since all biology depends upon protein creation, and there are just a few good ways to create proteins, it is not surprising to find similar genetic codes to create proteins across all forms of life. Common genetic codes could certainly be the natural result of a “limited solution space” (to use engineering jargon). It is proof neither of a common ancestor nor an intelligent designer.

“SMART” MEMBRANES

We admitted that we weren’t really sure we understood Tony’s seventh point (“That these Functions will have quality control processes that attempt to validate incoming parameter variables.”) and apparently we, in fact, did not understand. He wrote to tell us,

#7 is referring more to the facts such as that the cellular membrane prohibits most non-needed material from crossing the cellular membrane, thus becoming available for whatever the cellular factory happens to be producing; or that DNA transcription errors are often corrected during replication.

It certainly is remarkable that the membranes around cells are selectively permeable. That is, they let the good stuff in and keep the bad stuff out. It is also true that the biological machinery which reads the DNA code has some error-correcting properties.

**Error Correction**

His clarification of his seventh point mentioned the automatic correction of DNA transcription errors. For those of you who are not familiar with error-correcting codes, here is a quick tutorial.

Some communication systems are designed to provide accurate communication of information even in the presence of noise which can cause some information to be corrupted.

For example, I am a substitute bowler in a bowling league. Everything is recorded electronically now; but in the past I needed to give handwritten bowling scores to the league secretary. My handwriting is not very legible, so my scores could be misinterpreted. Adding checksums would make sure that erroneous scores could be detected and corrected. Here’s how:

These are the actual scores from my last three league-sanctioned weeks. The fourth line is the sum of the three numbers above it.

<table>
<thead>
<tr>
<th>Score 1</th>
<th>Score 2</th>
<th>Score 3</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>30-Jan-18: 149</td>
<td>138</td>
<td>157</td>
<td>444</td>
</tr>
<tr>
<td>13-Mar-18: 152</td>
<td>164</td>
<td>167</td>
<td>483</td>
</tr>
<tr>
<td>20-Mar-18: 137</td>
<td>135</td>
<td>138</td>
<td>410</td>
</tr>
<tr>
<td>Checksums: 438</td>
<td>437</td>
<td>462</td>
<td>1337</td>
</tr>
</tbody>
</table>

Suppose I wrote the score for Game 1 on 13 March so badly that the 5 looked like a 6, so my score appeared to be 162 (instead of 152). In that case, the sum of the three games that day would be 493, which does not match the series total of 483. The secretary would know that for 13 March, one of the individual game scores is wrong, or the series total is wrong; but which one is wrong?

The sum of the Game 1 scores is 448, which does not match the checksum (438). Therefore, the secretary would know one of the Game 1 scores (or the checksum for Game 1) is wrong. Since all the checksums and series totals add up to 1337, the secretary would know all the checksums and series totals are correct.

Comparing the sums of the individual game scores with the series totals and checksums would not only alert the league secretary to the fact that there is an error in the first game of my 13 March scores, the secretary would also know that the score I had erroneously written was 10 pins too high. The checksums allow any single error in any row or column to be detected and corrected. Our point is, even the simplest error-detection and error-correction scheme is complicated. Tony’s point, we think, is that error-detection and error-correction algorithms are too complicated to happen by chance.

**Self-limitation**

We dismissed Tony’s eighth point as self-evident, saying nothing more than, “There’s nothing you can do that can’t be done.” So, Tony clarified it.

#8 is self-evident and self-limiting. It necessarily excludes our DNA system from being useful in all environments. Our DNA system has been exquisitely tuned to our Earthly environment with all of its many biomes. However, it does not contain the information needed for us to live, unassisted, outside of our Earthen environment, and no amount of time would add that information to our DNA. Having self-limiting features allows for a hypothesis to be falsified. In short, if we could evolve to live on the Moon, Mars, or Venus without technical assistance, I would be wrong.

The problem we have with this argument is that it is too hypothetical. Yes, if we could evolve to live on Mars, it would prove evolution is possible—but without experimental proof that we actually could evolve to live on Mars, the conjecture is irrelevant. And, to get nit-picky, if we “evolved” to live on Mars, that would not really be evolution—it would be adaptation. There’s a subtle difference between evolution and adaptation. Furthermore, proving that we could adapt to live on Mars in the future does not prove that dinosaurs evolved into birds in the past.

**Economy of Reuse**

We frankly admitted that we didn’t know what Tony meant by his 13th point (“That the cellular environment modifies Function expression as an input parameter.”) He sent us this clarification:

#13 means, a particular gene (functional code) in one cellular environment may behave differently than the same gene (functional code) in another cellular environment, depending on how it is coded. Same function. Same Code. Different results. Why this matters is that what we see in nature is the repetitious use of genetic codes across unrelated species. A banana, a chimp, a starfish, and a human all share genetic information, not because we are related through common descent, but because the language of the genetic code is flexible enough to be reusable, like a good function library in C++.
Why reinvent the wheel?

Yes, we recognize that every program that runs on a Windows computer needs to be able to recognize a mouse click. Depending upon the situation, a mouse click might open a file, follow a link, or start a program. It would be stupid to write new code to recognize a mouse click every time. It makes much more sense to store the sequence of instructions that recognize a mouse click in a software library and incorporate that same sequence in every program that needs it, no matter what that program does in response to the click.

Junk DNA

Tony’s 14th point was that all DNA is functional, even if scientists haven’t figured out what its function is. We mostly agreed. The professional literature often contains articles written by geneticists who have discovered a previously unrecognized function in some portion of the DNA molecule. However, we believe that there might be a few parts of the DNA molecule that were functional at some time in the past, but a mutation has rendered that function inoperable. If the impairment caused by that mutation isn’t sufficiently harmful, natural selection might not remove it from the gene pool.

Tony’s response was,

#14 I will concede the point if you concede that malfunction does not equal non-functional for the purpose of this hypothesis. Transcription errors and deleterious mutations are exactly the type of mutations this theory predicts we will find in abundance.

Yes, we agree that “malfunction” is different from “non-functional.” The radio in my “new” truck (which I have had since 2004) distorts at even moderate volume. The radio in my old truck didn’t work at all when I sold it. The radio in my new truck malfunctions, and the radio in my old truck was non-functional; but both trucks got me (and my cargo) to my destination and back, which was all I really needed from a truck. The distinction between “malfunction” and “non-function” didn’t really matter to me.

Tony said, “this theory predicts” an “abundance” of mutations. Which theory was he talking about? Evolution or his theory? We presume he was talking about evolution because later in the second email he said,

#19 Agreed. I should have stated that as Random Mutations cannot create new information for Natural Selection to act on. However, if natural selection “filters information, keeping the good information and rejecting the bad information”, why are there so many deleterious inherited mutations? Shouldn't they have been rejected?

Apparently Tony thinks there are “so many deleterious inherited mutations,” which is more than he thinks the theory of evolution would predict. That’s more of a subjective opinion than a scientific proof.

Regardless of whether the DNA of a particular species was initially created by evolution or design, eventually the Second Law of Thermodynamics is going to introduce some harmful mutations, many (probably most) of which will be eliminated by natural selection. The term “abundance” is rather vague.

We agree with Tony in principle, but we don’t think it matters as much as Tony apparently does.

Tony’s Conclusion

In our response to his first email, we admitted that we had to guess exactly what Tony’s point was. He ended his second email with a better explanation. We will give him the final word.

#16-18 Your computer analogy is good, but it ignores the Object-oriented Programming portion which is what this hypothesis is about. DNA is one giant code library that is reused throughout all known life. Physics is your computer, the framework that controls the conversion of information into material reality. We have no clue what the operating system is. I am not even sure there has been any research done to answer the question of "Er..just how do all these organisms from vastly different lineages speak the same genetic language?" I mean, it's more complex than binary or ternary, contains the ability to create every biological molecule, and had to be fully functional in the first cell in order for it to survive.

Note that the fact that their genes are different is irrelevant. All life uses the exact same programming language and has since the first cell. The language has never, ever changed. [italics his] If common descent were true, and #19 and #25 are also true, then the first cell had to contain all of the genetic information ever to have existed on the planet. This directly contradicts the theory of evolution. But if common descent is false, how do we account for the same genetic code showing up in unrelated creatures in the given time frame? If common descent is false why do you share genetic information with a banana?

…

#23 You hit the nail on the head, actually, though it extends far beyond embryology. If your laryngeal nerve didn't grow at the correct rate you would die before you could be born.
However, it also applies to other things such as cell death and cell replenishment over a lifetime (https://www.sciencealert.com/scientists-discover-a-new-way-to-get-cancer-cells-to-self-destruct) and other biological processes that are very time sensitive. Our genetic machinery operates so much more efficiently than man-made computers that I could scarcely begin to know how to quantify the difference. Imagine if the timing of the cellular factory somehow 'forgot' to start reproducing the cells that make up your lungs. Too many cells is a deadly problem, as is too few.

**Object-oriented Creation Emails**

Nathan had several comments about Tony’s proposal last month about looking at creation from an object-oriented perspective. Here is how it began:

Hello DWJ,

I wanted to add in my two cents regarding the email from Tony (Object-oriented Creation).

I think that with point 13, Tony was saying that the cellular environment (in addition to the DNA sequence) will also have an input function on how the information in the DNA is expressed. For example, during embryo development, the blastula will have a gradient of certain signalling [sic] chemicals from one pole to the other. These different chemical levels will determine what genes are expressed in those cells, which will ultimately lead to some cells turning into a head, and other cells turning into a tail (this is a vast oversimplification, but you get the idea). If this is what Tony meant, then he is hinting at some evidence that the DNA is NOT the only source of information in a cell. The membrane of the unfertilized egg (which might be one source of the varying chemical gradients) probably also carries precise information that has many downstream effects (as it interacts with the information in DNA) during the organism's life.

Another example of what Tony might be saying in point 13, is how muscle cells repeatedly exposed to low oxygen environments will adapt by growing more mitochondria. This is a big reason why long distance running gets easier after a while. In this sense, the expression of the information in the DNA (which results in larger and more mitochondrial growth) is determined not just by the DNA itself, but by the chemical "experience" of the cells.

Nathan's point is that not all of the information is in the DNA. Some of the information is in the biological processes which read the DNA and act upon that information.

Let us try to make Nathan’s point by continuing the computer analogy. Obviously there is information in the software loaded into the computer—but beyond that, there is information built into the computer itself. That information tells the computer how to read the software and what to do in response.

A DNA molecule in a test tube has information in it—but without a cell to act on that DNA, it is as useless as a computer printout of some software sitting on a desk.

The rest of Nathan’s email contained some speculation about whether the hypothetical designer reused genes out of laziness or necessity. That speculation is irrelevant because if there is only one possible gene that could perform the necessary function, that constraint would apply to random evolution as much as conscious design.

Let’s move on to Bill’s email.

Dear Mr. Pogge,

I have been a reader of your newsletter for a number of years now and enjoy it very much. Please keep the sound logic on the impossibility of biological evolution coming - it is greatly needed.

Regarding your latest newsletter, 'Object-oriented Creation', (why similarities of so many species), pt#17 (from Tony); The reason there are similarities is because they all have to live in the same environment, planet Earth. All will be subject to the same measure of gravity, same atmosphere, same solar radiation, same general measurements [sic] of heat, cold, moisture, etc, etc. So obviously, there will be many necessary similarities. However, ONLY AN INTELLIGENCE could generate the prolific variety of living organisms [sic] we see today and have them all thrive in the natural environment together.

Anyway that's my take on it. Keep up the good work,

Bill

Evolutionists would (and do) argue, "ONLY EVOLUTION could generate the prolific variety of living organisms we see today and have them all thrive in the natural environment together."

In both cases (Bill and the evolutionists) they are confusing faith with proof. It is a scientific fact that there is a prolific variety of living organisms thriving in the natural environment together. Absent any actual observation of what happened, any explanation of how that all happened is philosophical, not scientific.
Visits Up, Hate Down

John wants us to publish more hate mail.

John complained,
Hello. Thanks for your work. Could you please publish more of the angry hate email from atheists? I used to love reading your responses shutting them down. You only seem to respond to nice email now.
John

John’s complaint is the closest we’ve gotten to any hate mail in a long time. That’s why we haven’t published any angry letters from evolutionists lately.

Is Anybody Listening?

One might think we aren’t getting angry letters from evolutionists because fewer people are visiting our website—but the data doesn’t bear that out. Our home page hit counter tells us that about 100 people per day visit our site these days, which is the highest it has ever been. Of course, we don’t know how many of those visits are made by evolutionists.

We also have a Facebook page which has been gathering more “likes” than ever; but it is reasonable to assume those visitors who like us are not evolutionists.

We don’t do a lot of posting on Facebook, because we don’t trust them. They could decide we are a “hate group” at any moment and shut us down. So, we just use Facebook to direct people to our website, over which we have total control.

Since we now get about four times as many visits to our website as we did at the turn of the century, the lack of hate mail isn’t because nobody is visiting the website any more.

Could it be that fewer people believe in evolution now than they did in previous years? Perhaps so, but we don’t have any data to support what may just be our wishful thinking.

Respectful Responses

We hope it has been clear from our previous columns that we love to make fun of stupid ideas, but we try not to make fun of the people who have those stupid ideas. To protect their privacy, and shield them from bullying, we just use the first names of people who send us email, and sometimes change their first name if someone else with the same first name has recently written to us. When we edit an evolutionist’s email, we do it to make his point clearer by removing boring, irrelevant digressions, or curse words and personal attacks. We want to discuss the idea—not the person.

It is of no value to take someone’s position and twist it into something foolish, and then refute the twisted foolish position (like MSNBC does ☺). We aren’t afraid to deal with issues fairly and honestly.

Facebook Comments

We don’t encourage people to post comments on our Facebook page because Facebook doesn’t protect the identity of the poster like we do. Anybody can click on the name of the person who posted the comment, and make some hateful responses directly to the poster. We haven’t had to delete anything anyone posts on our site—but we will delete offensive posts, if necessary.

The only (mildly) angry Facebook comment we have gotten came from Michael. He posted:

If it DENIES evolution, it ain't science. And if it's AGAINST evolution, it damned sure ain't science. But, hey! Nobody really has to believe OR disbelieve anything! Whatever floats your boat. Evolution doesn't care.

The natural human response to a snarky comment like that is to dismiss it by thinking, “Why would anyone say something like that?” A better response is to wonder genuinely, “Why would anyone say something like that?” and seek to find out the answer. So, we replied,

What is your definition of science?

Michael’s long response began,

Science is any discipline that uses the scientific method to study given subject areas of interest. ...
This was followed by a link to a website that gives an excellent description of the scientific method. It really surprised me because I was expecting Michael to say that the scientific method was passé and had been replaced by consensus.

From Michael’s original comment, I had wrongly assumed he was a young skull full of mush. His respect for the scientific method took me by surprise.

In his reply Michael said, “I used to teach this stuff in my Research methods class.” Facebook told me he was a retired teacher, and provided photographic proof that he certainly is not young. So, with this newly found respect for Michael’s opinion, I replied,

Yes, we agree that science uses the scientific method to discover the truth. What experiments have verified the theory of evolution? Perhaps a better way to ask the question is, "Why do you think the theory of evolution is 'science' and not 'philosophy'?"

He replied,

First, the reason that evolution / Natural Selection theories are science is generally because it follows the scientific method. More specifically, evolution studies follow the scientific model of developing a hypothesis, observation and measurements of relevant events (data), analysis and interpretation of the results. The conclusions are then organized into a theory.

To make things clear, Scientific theories must be constructed based on the empirical observation and interpretation of events. The purpose of that theory is to explain the phenomena being studied. If it doesn’t follow the steps listed above, it’s not a proper scientific theory. Since theories of evolution are made in that fashion, the study of Evolution is properly considered a science.

Philosophy, on the other hand, is NOT empirical - it is logical. That is, propositions about some subject are formed, analyzed using logic, and the conclusions of that analysis are the basis of philosophical ideas.

Later - hopefully tomorrow or the next day - I’ll describe some of the studies that illustrate the scientific nature of evolution and natural selection theories.

Except for his claim that evolution follows the scientific method, we are in complete agreement. Michael seems to respect the scientific method as much as we do. Our position is that the theory of evolution isn’t scientific because it doesn’t follow the scientific method. We were really looking forward to the descriptions "of the studies that illustrate the scientific nature of evolution" tomorrow or the next day. I replied,

We will look forward to specific examples of how you think the scientific method validates the theory of evolution.

As usual, that’s where the conversation ended, because there are no specific examples of studies that illustrate the scientific nature of evolution. Nine weeks of tomorrows have gone by, and we haven’t heard from Michael again. It is true, "Tomorrow never comes."

**IMAGINE THE RESPONSE**

Michael’s original comment was in response to our article on ghost apes. Let’s imagine what Michael could have said about that article.

Step 1 of the scientific method begins with an observation. The DNA of some species of apes was seen to differ from what an evolutionist would expect. Step 1—check!

Step 2 is to develop a hypothesis that explains the observation. The hypothesis in this case is that there is a “ghost lineage of apes” which must have been the unknown common ancestor of these diverse species of apes. Computer programs were used to determine what the DNA of this ghostly, elusive common ape ancestor must have been like. Step 2—check!

Step 3 is to perform some experiments to compare the DNA of the ghost apes to the hypothetical DNA predicted by the computer analysis. But, since there is no ghost ape DNA, this step could not be done. Step 3 was skipped.

Step 4 is to announce that experiments have shown the hypothesis must be correct. But, the experiments were never done. However, they “know” the experiments would have confirmed the hypothesis if the experiments had actually been done, so the existence of ghost apes was confirmed—but only in their minds.

The conclusion was deemed to be logical, which makes it philosophical. The conclusion was not confirmed with empirical observations, so it isn’t scientific.

 Granted, this is our imaginary response that Michael might have considered making before he realized that the evolutionists’ belief in ghost apes is philosophical, not scientific, and wisely didn’t make that response. The point is, we have to imagine Michael’s response because he did not fulfill his promise to make one.

Nobody has ever given us an example of how the scientific method validates the theory of evolution because there isn’t one.

We are still looking forward to Michael giving us specific examples of how he thinks the scientific method validates the theory of evolution. Hope springs eternal—but we aren’t holding our breath.
Finding Articles on Creation and Evolution

This month’s website review shows how you can use a google.com website called Scholar to find articles about creation and evolution. Since I spend some time every month searching for interesting articles on this topic, I just happened to discover scholar.google.com while searching for articles using my iPhone.

If you just enter scholar.google.com into a web browser, you will arrive at the home page of Google Scholar. On this page you can sign in with your Google account, or create one, or configure settings for searches you make by selecting either the Articles or Case Law radio button found under a large search box into which you enter your desired research topic. Under the search box, you will find the caption “Stand on the shoulders of giants”.

Selecting the Articles button and entering “Creation and Evolution” in the search box you arrive at a new webpage that presents the results of your search. For this topic, Scholar reports “About 3,750,000 results (0.04 sec)” and gives you the option to select “Year” where you can choose: 1) Any time (the default); 2) Since 2018; 3) Since 2017; 4) Since 2014; 5) Custom range…; 6) Sort by relevance (the default); and 7) Sort by date. Also, you have the options to include patents, include citations, and view “My profile” or “My library”.

The search results presented on the results page are identified as plain links or [BOOK], [CITATION], [HTML] or [PDF]. Under the brief description of a search result you will find a star icon which allows you to enter the link into your library, “Cited by xxx” link and a link to “Related articles”. Also, on the first results page you will find links to “Related searches”.

Scholar really helps you if you use Google as your search engine to find information on just about any topic. Being able to create a library of search results makes it easy to come back later to read your saved links.

Space does not permit me to discuss any of the links found by Google Scholar on the topic of Creation and Evolution so just perform the search yourself and use the various options available to limit the search results to a more manageable number than 3,750,000. Also, when searching for information using Google, remember it is important how you enter your search criteria, i.e. using quotes and keywords.