

Disclosure

of things evolutionists don't want you to know

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IN SEARCH OF "EVOLUTION 3.0" – PART 2

by Michelle Teague

These are the remaining four contenders for the next incarnation of the theory of evolution.

Last month, I began the story of how I decided to discover for myself if the theory of evolution is really "a theory in crisis." I discovered eight theories that have been proposed to replace the neo-Darwinian Modern Synthesis. They are:

1. Context driven Actualization of Potential (CAP)
2. Self Organization
3. Natural Genetic Engineering
4. Neo-Lamarckism
5. Symbiogenesis
6. Evolutionary Developmental Biology
7. Neutral Evolution
8. Facilitated Variation

There was only space to discuss the first four in last month's "six-page newsletter" (which turned out to be eight pages long). Here are the remaining four theories.

5. SYMBIOGENESIS

This theory has been attributed to Lynn Margulis, in 2002, and Boris Mikhaylovich Kozo-Polyansky, in 2010.

Symbiogenesis is the theory that **acquired genetic material (rather than random mutation) is responsible for significant changes to the genome.** It involves one organism ingesting or otherwise in-taking another organism – which is usually, but not always, a mutually beneficial relationship. This is why it could be called the "You are what you eat, and the human genome has gone viral" theory. ☺

E. Coli in humans is one given example. This theory is favored as an explanation for the origin of eukaryotic cells. It claims one cell enveloped

another which resulted in the formation of the nucleus. **The idea behind this theory is that new genetic information is acquired suddenly, through lateral transfer of genes from the acquired organism.** The way that retroviruses such as HIV insert their DNA into the human DNA is used to show one of the ways this can happen. Depending on what website you look at, anywhere from 1 to 50 percent of the human genome is made of retroviruses—which are supposedly linked to our past evolution. They are trying to use gene studies to support this idea.

It has also been observed that genetic material of bacteria can be acquired by insects, thereby giving them new functionality—such as gaining the ability to metabolize nitrogen.

The favorite example given by advocates of this theory is that of "green animals." These are mostly marine animals that feed on algae such as mollusks, slugs, and worms. They are fed algae, and under the conditions of starvation in the light, these animals gain some pretty interesting characteristics. According to Lynn Margulis,

"The animal's food becomes the animal's body. And in these cases that I will show, the animals have become completely green, and they inherit the greenness to all the offspring... these worms look like seaweed, and they fix carbon into photosynthate like seaweed, but [when] you get close, they have muscles, they have mouths, they're completely green, and they're photosynthetic. Now they didn't go from a translucent worm to a completely photosynthetic worm that lies on the beaches and photosynthesizes as if it were a plant - **they**

didn't do that step by random mutation - they did it by acquisition of a microbial genome and the integration of the genome.”¹

The failure of this theory is that it does not account for the origin of new genetic information. Like recombination or gene shuffling, it can only work with what's already available.

Jerry Bergman points out,

... life forms most active in exchanging genes are supposedly the most primitive (such as bacteria). We would expect, if the basis of evolution was the exchange of genes, then those life forms most active in exchanging genes would evolve faster. Bacteria are by far the most active known gene exchangers, yet are considered by evolutionists among the most primitive, lowest evolved, life forms known.²

Bergman also notes that

Furthermore, there is no evidence that many animals such as “the 10,000 species of birds or the 4,500 species of mammals originated by symbiogenesis”.³

In the case of retroviruses, the only DNA that is inserted into the human genome is the instruction for replicating the virus. It is a sneaky little trick to get the mechanisms of the cell to replicate the retrovirus. The trick doesn't add any useful information that seems like it would be worth keeping for beneficial changes. Also, from what I understand, the only genome changes that are heritable are the ones that happen in the germ cells.

This seems to me to be limited in that only organisms that are capable or prone to symbiotic relationships can acquire new genes. I eat fresh green food all the time, but I can't photosynthesize. ☺

6. EVOLUTIONARY DEVELOPMENTAL BIOLOGY (EVO DEVO)

Evo devo has been attributed to Rudolf Raff, *et al.*, in 1996. It is the study of the development of an organism from the fertilized egg. It stems from the understanding that body form is determined very early in embryonic development, so in order to make a significant change to the overall shape of an organism, it has to happen very early.

¹ Lynn Margulis interview by Jay Tischfield, chair of Genetics department at Rutgers, The State University of New Jersey, at time 14:20 in <http://www.youtube.com/watch?v=KlhW12dGfFk>

² Jerry Bergman, *TJ* volume 17, issue 2, pg. 24, “The century-and-a-half failure in the quest for the source of new genetic information”

³ *ibid.*

Biologists have begun to study embryonic development in an attempt to understand how new body plans could arise. A quote from Nova's website on the topic of evo devo says,

It may come as a surprise, but the genetic ingredients that assemble you are strikingly similar to those that assemble a fly. So why do you and a fly look so different as adults? The answer lies in where, how, and for how long those ingredients “turn on” during your embryonic development. The intricacies of this early stage of life are now being revealed thanks to the new field of “evo devo,” short for evolutionary developmental biology. In this interview, Harvard developmental biologist Cliff Tabin talks about why evo devo is so fascinating, how he keeps up in a dizzyingly advancing field, and how he, like most biologists, was totally blindsided by the discovery that all animals share the same basic toolkit of body-building genes.⁴

In the article, Tabin says,

Fundamentally, the genetic toolkit, as we call it, was already there in the common ancestor. And that ancestral set of genes was powerful and versatile enough to provide the material for generating the diverse forms of animal life we now see on Earth. That was something that nobody expected, and it's made the study of various organisms very profound. It means what you learn from studying the development of a fly really has direct implications for understanding the way we are made ourselves, because as different as a fly is from a human and as long ago as we diverged, we're using basically the same genes to do the same thing—to make organization emerge in an embryo.⁵

These scientists also recognize that the fossil record does not support gradualism. Evo devo advocate Jeffrey Schwartz says,

Given the simplicity of Darwin's theory of evolution, it was reasonable for paleontologists to believe that they should be able to demonstrate with the hard evidence provided by fossils both the thread of life and the gradual transition of one species into another. In truth, while claims of such demonstrations have been the rule rather than the exception among paleontologists, we are still in the dark about the origin of most major groups of organisms. They appear in the fossil record as Athena did from the head of Zeus—full blown and raring to

⁴ <http://www.pbs.org/wgbh/nova/evolution/what-evo-devo.html>

⁵ *ibid.*

go. Nevertheless, Darwin's model of evolution, being predicated upon the gradual accumulation of countless infinitesimally minute variations, would demand the existence of insensible series of transitional forms in the fossil record, even if their presence in the rocks cannot readily be documented.⁶

The fossil record shows sudden alterations, as opposed to the gradual minute changes demanded by neo-Darwinism.

Evo devo biologists think that mutations to Hox genes and other regulatory genes are responsible for the radical changes to developing organisms required by the fossil record because these regulatory genes direct development. There are three problems with this theory.

1. Hox genes are not expressed until the basic body plan is already in place.

2. Hox genes regulate expression on many different genes. Experiments have shown that mutations to multiple genes are generally harmful.

3. Hox genes do not contain information for building structures, nor do they contain information on necessary epigenetic information. They can only change information in DNA.

This theory suffers the same significant problem as facilitated variation, as they both propose mutation to regulatory regions as the driving force behind macroevolution. Where did the regulatory regions, and the information they regulate, come from in the first place?

7. NEUTRAL (NONADAPTIVE) EVOLUTION

Neutral (Nonadaptive) Evolution, as proposed by Michael Lynch in 2006, states that natural selection plays little or no role in small population sizes. Variation is dependent solely on neutral changes such as random mutation, genetic recombination, and genetic drift. It is based on observations of the differences in large populations (such as bacteria, single-celled organisms) vs. small populations (most of the animal kingdom). Natural selection works well in larger populations which have smaller genomes with few non-coding regions, lower mutation rates, and more genetic recombination in the sexually reproducing organisms. In contrast, smaller populations have higher mutation rates, larger genomes with a lot of non-coding regions, and

experience less genetic recombination. Natural selection does not work well in these populations. Instead, neutral changes – genetic drift, genetic recombination, and random mutations – become the driving factors of evolutionary change. As the genome grows, it accumulates non-functional sections that are then able to be mutated without being deleterious. The environment plays a big role in this process, too, as the success of the organism is affected by natural disasters or natural benefits like large food sources.

Neutral evolution cannot account for the species diversity. This theory incorrectly still maintains a gene-centric view. It does not take the role of epigenetic elements in formation of body plans into account.

It offers no explanation for the molecular machinery present in eukaryotes (spliceosomes)—machinery necessary for the genetic changes Lynch says occur; nor can it account for new information.

Genetic traits are not fixed because neutral processes do not favor beneficial mutations.

8. FACILITATED VARIATION

Facilitated Variation was proposed by John Gerhart and Marc Kirschner in 2007. Actually called "Facilitated Phenotypic Variation," this theory's main idea is that it is not changes to the protein coding regions of DNA but rather changes to the regulatory regions that cause heritable changes. It begins at the Cambrian with the premise that an "enormous toolkit" evolved pre-Cambrian and has remained conserved ever since. This toolkit, comprised of "core components and processes" evolved by some other means than facilitated variation since this toolkit is needed for facilitated variation. About this toolkit, Gerhart and Kirschner say,

This, we argue, was such a powerful and versatile toolkit that post-Cambrian animals could largely omit further functional innovation at the gene product level (protein and functional RNA evolution) and instead exploit regulatory innovation to diversify anatomy, physiology, and development.⁷

In other words, the toolkit evolved through some unknown process that no longer exists because the toolkit made it obsolete. This is important as they take issue with the neo-Darwinian idea of mutations to protein coding genes. As they put it,

⁶ Jeffrey H. Schwartz, 1999, *THE ANATOMICAL RECORD (NEW ANAT.)* 257:15–31, 1999, "Homeobox Genes, Fossils, and the Origin of Species", page 15, http://www.pitt.edu/~jhs/articles/homeobox_genes.pdf

⁷ John Gerhart and Marc Kirschner, *PNAS* May 15, 2007. "The theory of facilitated variation", http://www.pnas.org/content/104/suppl_1/8582.full.pdf+html?sid=7dbd4ef6-d527-497f-855c-1c4a6eebc512

Functional conservation might seem to constrain phenotypic change because most sequence changes of those DNA regions encoding functional proteins and RNAs are lethal. (Note that the regulatory parts of proteins and RNAs are, we think, more changeable.) These DNA regions are effectively excluded from the list of targets at which genetic change could generate viable selectable phenotypic variation. They just cannot be tinkered with.⁸

They also take issue with the neo-Darwinian process of small individual stepwise changes. In an example of the differences in the beaks of Darwin's finches, they point out that,

the beaks of some species are large and nutcracker-like, and those of others are small and forceps-like. As Darwin did, we too might imagine that many small heritable beak variations accrued slowly in the different species to create large observable differences. Small variations are arguably the only viable and selectable ones, because they would allow the upper and lower beaks, the adjacent skull bones, and head muscles to coevolve with each other in small selected steps, thereby maintaining viable intermediate beaks along the paths to the nutcracker and forceps forms. Repeated selections would be needed to coordinate the numerous, small, independent beak and head changes, all requiring genetic change.⁹

They argue that these necessarily small changes would not likely be large enough to be selectable, while a significant change - one large enough for selection - runs into the issue of necessary coevolution. (In this case, the coevolution of the upper beak, lower beak, skull bones, and head muscles.) That is, a significantly larger upper beak is useless without a similarly mutated lower beak, and stronger bones and muscles.

Some of the key ideas used to support this theory are weak linkage, exploratory processes, and compartmentation. The development of organisms is directed/controlled by regulatory and signaling processes.

Weak linkage refers to the fact that the developmental processes have the capability to act without interaction from regulators—they just self-inhibit this. The regulatory processes (those that direct when and where development occurs) do not contain instructions for building bodies and are not strongly coupled to the developmental processes they control. Therefore, the regulatory

and developmental processes do not have to coevolve. Changes to the signaling system are not constrained by the development processes they control. A change in the signaling system that directs the body development will result in a change to the body.

Two examples given of exploratory processes are the growth of cellular microtubules and the wiring of the nervous system. Growing tissues extend out exploring the growth space until they connect with a target and are stabilized. Tissue that does not connect with a target shrinks back. This type of exploratory growth process is important for getting past the problem of coevolution as in the example of the finch beaks as muscle and vascular tissue grow out to meet bone and skin. Gerhart and Kirschner explain,

Adaptable robust processes can support nonlethal phenotypic variation in other processes, a situation called “accommodation” by West-Eberhard. A specific example is the evolution of the tetrapod forelimb to a bird or bat wing. Not only did the length and thickness of bones change, but also the associated musculature, nerve connections, and vasculature. Did many regulatory changes occur in parallel, coordinated by selection, to achieve the coevolution of all these tissues in the limb evolving to a wing? The answer comes from studies of limb development showing that muscle, nerve, and vascular founder cells originate in the embryonic trunk and migrate into the developing limb bud, which initially contains only bone and dermis precursors. Muscle precursors are adaptable; they receive signals from developing dermis and bone and take positions relative to them, wherever they are. Then, as noted previously, axons in large numbers extend into the bud from the nerve cord; some fortuitously contact muscle targets and are stabilized, and the rest shrink back. Finally, vascular progenitors enter. Wherever limb cells are hypoxic, they secrete signals that trigger nearby blood vessels to grow into their vicinity. This self-regulating vasculogenesis operates not just in the limb but throughout the body, accommodating to growing tissues, to exceptional demands such as pregnancy, and alas to growing tumors. The adaptability and robustness of normal muscle, nerve, and vascular development have significant implications for evolution, for these processes accommodate to evolutionary change as well. In the case of the evolving wing, if bones undergo regulatory change (driven by genetic change) in length and thickness, the muscles, nerves and vasculature will accommodate to those changes without requiring independent regulatory change. Coevolution is avoided. Selection does

⁸ *ibid.*

⁹ *ibid.*

not have to coordinate multiple independently varying parts. Hence, less genetic change is needed, lethality is reduced, larger phenotypic changes are viable, and phenotypic variation is facilitated.¹⁰

Like weak linkage, compartmentation allows for independent evolution of certain processes. During the phylotypic stage of embryonic development, the body is divided into compartmental sections. These sections can then develop independently without constraining each other, as is explained,

Regulatory specification occurs independently and in parallel in different compartments. Also, we think that the compartment map deconstrains development preceding the phylotypic stage, when it first appears. The single-celled egg, we suggest, develops the compartment map by a robust adaptable process requiring little regulatory input. Thereby, the egg is freed to evolve fitness-enhancing diversifications of size, shape, nutrient provision, and gastrulation, as happened repeatedly in chordates and arthropods.¹¹

So, as I said last month, the ongoing effort by evolutionists to replace neo-Darwinian evolution with something else is, in my opinion, the most powerful evidence against the theory.

Email

QUANTUM EVOLUTION

Does quantum physics prove biological evolution?

In last month's feature article, Michelle listed Context-driven Actuation of Potential (CAP) as one of the possible successors to Neo-Darwinian evolution. She quoted this summary of CAP from the seminal paper itself.

This paper proposes a different critique of Neodarwinian theory, which derives instead from a nonclassical and nondeterminist view of physics, as developed recently in quantum mechanics. If the notion of variation is examined carefully, one realizes that what is naturally selected for in the Neodarwinian view are essentially forms of concrete and actual matter. We present a more general view in which forms of potentiality coexist with forms of actuality. We will see that the presence of potentiality states points to a non-

¹⁰ *ibid.*

¹¹ *ibid.*

Kolmogorovian probability structure at the basis of the context–entity interaction in evolution, which makes possible different pathways of evolution than were allowed for before.”¹²

This sounds a lot like double-talk, and perhaps it really is nothing more than that. This prompted an email from one reader asking for a glossary of terms. We really can't blame him because I'd never heard of Kolmogorovian probability either. I had to look it up.

The book Kolmogorov: Foundations of the Theory of Probability by Andrey Nikolaevich Kolmogorov is historically very important. It is the foundation of modern probability theory. The monograph appeared as "Grundbegriffe der Wahrscheinlichkeitsrechnung" in 1933 and build [*sic*] up probability theory in a rigorous way similar as Euclid did with geometry. Today, it is mainly a historical document and can hardly be used as a textbook any more.¹³

So, "non-Kolmogorovian probability" simply means "non-traditional probability." Therefore, non-Kolmogorovian probability is somehow different from the well-established laws of probability and statistics.

"Non-deterministic" means "unpredictable."

Traditional probability is predictable—to a certain extent. That is, one can't determine which gambler will win or lose on any particular spin of a roulette wheel; but one can calculate with remarkable accuracy how much money will be lost by all the gamblers each day if one knows the total amount of money they bet on the wheel.

The fact that CAP is based on some unspecified, unorthodox version of probability raises some legitimate questions about the validity of the theory. Hence, the appeal to quantum mechanics.

QUANTUM MECHANICS

Quantum mechanics is a branch of science generally applied to chemistry and physics but not biology. Historically, quantum mechanics was developed to explain physical phenomena and chemical reactions, and has grown from there. Let's stroll down memory lane and see how quantum physics grew out of classical physics.

The two iconic charts found in nearly every science classroom are: (1) the racist depiction of an ape evolving through several sub-human black

¹² Diederik Aerts, *et al.*, 1 December 2012, "On the Foundations of the Theory of Evolution", <http://arxiv.org/pdf/1212.0107v1.pdf>

¹³ <http://kolmogorov.com/Foundations.html>

primates to the pinnacle of evolutionary perfection—the white man; and (2) the Periodic Table of the Elements. These two charts are the essence of science (in some minds). **The Periodic Table is the foundation for understanding all chemical reactions in classical chemistry.**

The Periodic Table lists all the known elements in order from lightest (in the upper left corner) to the heaviest (in the lower right corner). The elements in each column have similar characteristics. That is, every element in a column reacts chemically as all the other elements in that column do. Each entry in the Table shows the atomic number and weighted average mass of all the isotopes of that element. This is good, factual science.

The traditional (classical) model of the atom is based on the Periodic Table. **It is important to understand the difference between a model of an atom and the atom itself.** The model of the atom helps us to understand how an atom reacts physically and chemically in certain situations.

The classical model of an atom looks like a planet with many orbiting moons. It describes the structure of an atom as a nucleus (consisting of protons, neutrons, and exotic sub-atomic particles) surrounded by orbiting electrons. These electrons orbit at specific distances, as if they were enclosed in thin shells with various diameters.

It is useful to view the atom this way for two reasons. One is that **chemical reactions can be predicted by knowing how many electrons are in the outer shell** (that is, how many electrons need to be shared with another atom to fill the shell). The other reason is that the electrons can be thought of as having a certain amount of energy depending upon which shell they are in. That allows one to determine exactly how much energy is needed to move an electron from one shell to another, which **tells something about the light that is absorbed or emitted when electrons move from one shell to another.**

The classical model works very well for predicting the behavior of atoms in many situations. But there are some situations where the classical model doesn't work. In particular, it **doesn't explain how light can act like both a wave and a particle**; and it doesn't explain how atoms interact with each other at subatomic distances or speeds approaching the speed of light. So, the quantum mechanics model was developed to further explain how atoms react with each other. It is a better model in the sense that **quantum mechanics explains all the classical atomic behavior, and more—but it is harder to understand because the math is very difficult.**

Since it is hard to understand, we won't try to explain it in detail. We will just say that, rather than picturing electrons orbiting neatly at specific distances in shells, it talks about the probability of electrons being in certain states. These states are multi-dimensional, requiring complex math with imaginary numbers.

Quantum mechanics is a useful model for predicting how atoms will act under certain circumstances which can be experimentally verified to be correct. **Quantum mechanics also makes some predictions that** cannot be experimentally verified easily (or cannot be verified at all). Some of these predictions **are surprising and paradoxical.** In particular, they include the viability of Schrödinger's Cat,¹⁴ which is both alive and dead until it is observed; quantum entanglement (sometimes referred to as "spooky action at a distance"),¹⁵ and the Multiverse.¹⁶ We don't want to open those cans of worms, so we won't take any position on them, other than to say that they are controversial, or perhaps misunderstood.

What we will say is that **quantum mechanics opens the door to many bizarre, paradoxical ideas—and CAP runs right through that door.** Once you are comfortable accepting the notion that paradoxical, unexplained phenomena are "scientific" because they are rooted in quantum physics, **you can accept anything.** CAP takes advantage of that by appealing to **unspecified aspects of quantum physics.**

CONTEXT-DRIVEN

CAP claims to be "context-driven." That means **behavior depends upon the circumstances.** For example, the clothing you wear is context-driven. If it is raining, you put on a raincoat. A raincoat is worn "in the context" of rain. "Context" is just another word for "circumstances."

Microevolution really is context-driven. That is to say, species really do adapt (within limits) to the environment (that is, the context) in which they are living. The size and shape of finch beaks have been shown to change somewhat depending upon the kind of food available. So, the "C" part of CAP is at least plausible.

¹⁴

http://en.wikipedia.org/wiki/Schr%C3%B6dinger%27s_cat

¹⁵

http://en.wikipedia.org/wiki/Spooky_action_at_a_distance

¹⁶ <http://en.wikipedia.org/wiki/Multiverse>

POTENTIAL

CAP claims to depend upon “potential,” that is, a possible outcome. If you place a bet on 17 Black on a roulette wheel, you have a potential to win 35 times as much as you bet. Kolmogorovian probability ☺ says you probably won’t win—but the potential to win does exist.

Human DNA contains the potential to produce people who will grow to be somewhat less than four or somewhat more than seven feet tall at maturity. Human DNA does not contain the potential to produce people who grow to be 5,280 feet tall (unless you invoke non-Kolmogorovian probability ☺).

ACTUALIZATION

Just because the potential exists, it doesn’t necessarily follow that the potential will be realized. That is, you could potentially win if you bet on 17 Black—but your dreams of big bucks won’t necessarily be actualized if you do.

CAP

DNA has been shown to have some potential for limited variability. It has also been observed that environmental conditions (the context in which a creature lives) can influence whether or not various characteristics are expressed (actualized) in some of its offspring. In this respect, CAP really isn’t any different than Darwin’s notion of variability and survival of the fittest.

The problem (for evolutionists) is that the amount of variation is limited by the maximum number of genetic combinations and ways that these combinations can be expressed. In other words, there is limited potential for change.

CAP tries to circumvent the limitations of variability by appealing to some unknown quantum phenomenon and unconventional laws of probability. In other words, in a world where anything can happen, and the known laws of probability don’t hold, then new life forms will evolve. The only reason this theory has been proposed to replace neo-Darwinian evolution (a.k.a. the Modern Synthesis) is because neo-Darwinian evolution is impossible in the light of modern science.

About Us

PHONE-FRIENDLY WEBSITE

We’ve made some changes to our website to make it more phone-friendly.

When we started this website, most users accessed the Internet with 1200 baud dial-up connections. Some had 2400 baud acoustic modems, and the cutting edge was 9600 baud. Some of our readers don’t remember that because our 17-year-old website is older than they are.

Download times were slow in those days, and web browsers were primitive. There were no active server pages or Java scripts. The early web page design tools didn’t work very well, so I used a simple text editor to convert every article to HTML using only the most basic features so that the pages would load quickly and work for every browser.

Times have changed; but our website hasn’t (very much). I still convert all the articles by hand. Our formatting style has remained constant for uniformity, and is geared toward making it easy to print the articles.

But now, more and more people are using their phones (or other personal computing devices) to access the Internet. David wrote to tell us his experience with our website.

I was just reading your page about why your website is 'no frills'. For this reason it was one of the only websites I could read on my old mobile phone without it being translated by Google (did you know Google automatically does that for complicated web pages being read on simple phones, even splitting them into pages?)

While I have a smartphone now, I know that many in the third world access the internet by old mobile phones, and only by mobile phones, so thought I'd point out the one problem I did used to have when reading your site that way. Basically, a lot of the pages are so big they wouldn't fit in the phone. I don't know if it's the amount of data or the length of the page (you'd assume it's the amount of data, but some other pages had a few pictures and were fine, and I'd think a few pictures would take up more memory than a few pages of text). Even the topical index could never load completely.

I'm not sure what to suggest doing about this without making the site more awkward to use for the majority of users who just want everything on one page, but I thought I'd make sure you're aware of the issue anyway.

Each month we add several articles to the website. As a result, the topical index, past newsletter index, and website of the month index were getting longer every month. Apparently old mobile phones had trouble with lists of more than 650 articles.

To solve this problem, we have broken the index pages up into one page for every year, with a master calendar page which directs traffic to the year of interest. We use simple tables which vaguely resemble the Windows 8 directory style. We hope this makes our website easier to use regardless of how you access it.

EVOLUTION IN EUROPEAN SCHOOLS

http://giertych.pl/stara/ksiazka4/evolution_en.pdf

Report of a hearing in the European Parliament on the teaching of evolution in European Schools

This month's web site review looks at an article, actually a pdf file, which describes the outcome of a hearing that was organized by the author, Maciej Giertych, a non-attached member of the European Parliament. This paper was recommended by a reader of our newsletter.

The paper begins by providing some background as to why Mr. Giertych decided to organize a hearing in the European Parliament on the teaching of evolution in European schools. The hearing took place on October 11, 2006. "Present at the hearing were a fair number of journalists, Members of Parliament and assistants. The session was provided with simultaneous translation into English, French, German and Polish."

At the session, Mr. Giertych explained that when he was in school he was taught that evolution was a biological fact scientifically proven by paleontology. He felt he needed to object when he learned from the school textbooks of his children that "the emphasis in teaching evolution shifted from paleontology to population genetics." Three invited speakers, a paleontologist, a sedimentologist and a human physiologist presented their views on evolution.

What makes for interesting reading is what happened as a result of this hearing in the European Parliament. "Next morning in the Polish press I (Mr. Giertych) was accused of propagating religious fundamentalism." Many false charges were made about Mr. Giertych and his three guest speakers.

The rest of the paper presents Mr. Giertych's views on evolution. He felt it necessary to defend his beliefs since the media would not accurately report his views. In fact he even states that "I am accustomed to the fact that the media lie".

In the paper, he organizes his discussion of the evolution controversy under the following headings: 1) Personal engagement, 2) Race formation (= micro-evolution), 3) Mutations, 4) Palaeontology, 5) Sedimentology, 6) Stratigraphy, 7) Catastrophes, 8) Teaching of the Catholic Church, 9) Breeding people, 10) Darwin can be used in various ways, and 11) Role of information in biology.

His concluding remarks are thought provoking. He says all he really wants is to encourage teaching the truth in schools.



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Disclosure, the Science Against Evolution newsletter, is edited by R. David Pogge.

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