

Evolution and Unification Thought

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I. Introduction

According to Unification Thought, the world is entering a stage in history when heaven on Earth can finally be realized. Heaven on Earth has both spiritual and physical dimensions. The spiritual dimension involves making God the center of the individual, the family, and society; while the physical dimension involves overcoming natural obstacles to human health, safety and happiness. Although technological advances have now made the latter seem attainable, the former often seems to be as far away as ever. How can God become the center of our existence if so many people — especially Western intellectuals — are persuaded that God doesn't exist?

Freud, Marx and Darwin are often regarded as the three pillars of modern "scientific" atheism. According to Freudianism, sex is the driving force of psychology and people are merely products of unconscious urges conditioned by early childhood experiences. According to Marxism, class warfare is the driving force of history and people are merely the result of material relations of production. According to Darwinism, survival of the fittest is the driving force of biology and the people are merely accidental by-products of unguided natural processes. All three ideologies treat people as material beings and God as an illusion.

The influence of Freudianism and Marxism reached a peak in the mid-20th century. The former had largely succumbed to critical scrutiny by 1990, however, and the latter declined after the collapse of the Soviet Empire in 1991. Although Freudianism and Marxism

still enjoy limited popularity among some academics, Darwinism is now by far the most influential intellectual justification for atheism.

It is thus a serious impediment to the establishment of heaven on Earth. In the words of the Unification Thought Institute: "Humankind today is entering an era when the ideal world can come to be realized; but what's posing the greatest obstacle on our path is precisely the theory of evolution."¹

It is important to note that "evolution" has many meanings. In the broadest sense it can refer simply to development, or change over time. Evolution in this sense is completely uncontroversial; no sane person denies the reality of change over time. For most people, and for Unification Thought, controversy arises primarily when "evolution" refers to the materialistic doctrine that living things in general, and human beings in particular, originated without any purpose or design.

What follows is divided into several sections. The first summarizes some salient aspects of Darwinian evolution; the second summarizes the view of biological origins in Unification Thought; the third highlights the contradictions between the two positions; and the fourth reviews some of the growing evidence that Darwinism is false. An appendix analyzes some ways in which Unification Thought's critique of Darwinism might be made more effective.

II. Darwinian Evolutions

Darwin's theory of biological evolution is set forth in *The Origin of Species* (1859), *The Variation of Plants and Animals Under Domestication* (1868), and *The Descent of Man* (1871). Some relevant implications of Darwin's theory are elaborated in his correspondence (as collected by his grandson, Francis Darwin), and in the writings of some modern Darwinists.

Charles Darwin called his theory "descent with modification." He wrote in *The Origin of Species*: "I view all beings not as special creations, but as the lineal descendants of some few beings" that lived in the distant past. The reason living things are now so different from each other, Darwin believed, is that they have been modified by natural selection, or survival of the fittest: "I am convinced that Natural Selection has been the most important, but not the exclusive, means of modification."²

Darwin did not pretend to understand the origin of life, though he speculated that it might have started in "some warm little pond" that contained all the ingredients necessary to make a living organism.³

Descent with modification presupposes the existence of one or a few organisms, and purports to explain how a great variety of living things evolved from them.

No one doubts that descent with modification occurs within existing species, in the course of ordinary biological reproduction. The question is whether descent with modification accounts for the origin of new species — in fact, of every species. Like change over time, descent with modification within a species is utterly uncontroversial. But Darwinian evolution claims much more. In particular, it claims that descent with modification explains the origin and diversification of all living things after the first.

As the name “descent with modification” implies, Darwinian evolution actually consists of two related but distinguishable theories: the theory of universal common ancestry, and the theory of natural selection or survival of the fittest. Although Darwinists occasionally acknowledge that the second is still somewhat controversial (since various other factors besides natural selection might be operating in evolution), they generally claim that universal common ancestry is supported by such overwhelming evidence that it can be called a “fact.” Darwinists justify this very strong claim on two grounds: (a) all living things share certain similarities, and the degree of similarity is assumed to indicate the degree of biological relatedness; and (b) the most likely alternative to common ancestry would be common design (and thus a designer), and naturalistic science (based on assumption that nature is all there is) excludes this alternative.⁴

According to Darwin’s theory of natural selection, all living things exhibit minor variations. If some variations render organisms more “fit” in the struggle for limited resources, those organisms will leave more offspring; they will be naturally selected. As a result, the fittest variations will become more widespread, and the population will change over the course of generations.

Although Darwin compared natural selection to an architect, he repeatedly denied that he intended to attribute conscious agency to it. In his view, “natural selection means only the preservation of variations which independently arise.”⁵ Although he did not know the origin of variations, Darwin was convinced that they are not designed by God, but arise randomly with respect to the needs of the organism and the direction of evolution. Thus “there seems to be no more design in the variability of organic beings, and in the action of natural selection, than in the course which the winds blow.”⁶

Harvard botanist Asa Gray accepted every aspect of Darwin’s theory except this one. He advised Darwin to assume “that variation

has been led along certain beneficial lines. Streams flowing over a sloping plain by gravitation (here the counterpart of natural selection) may have worn their actual channels as they flowed; yet their particular courses may have been assigned.” Gray acknowledged that “the accidental element may play its part in Nature,” but he was convinced that useful adaptations testify to design: since natural selection merely picks out variations which are independently presented to it, the presence of design in the result indicates that at least some variations are designed.⁷

Darwin disagreed, and he concluded *The Variation of Plants and Animals Under Domestication* with a lengthy refutation of Gray’s position. Using the metaphor of a house built by an architect utilizing uncut fragments of stone, Darwin wrote: “Can it be reasonably maintained that the Creator intentionally ordered, if we use the words in any ordinary sense, that certain fragments of rock should assume certain shapes so that the builder might erect his edifice? If the various laws which have determined the shape of each fragment were not predetermined for the builder’s sake, can it with any greater probability be maintained that He specially ordained for the sake of the breeder each of the innumerable variations in our domestic animals?... But if we give up the principle in one case — if we do not admit that the variations of the primeval dog were intentionally guided in order that the greyhound, for instance, that perfect image of symmetry and vigor, might be formed — no shadow of reason can be assigned for the belief that variations, alike in nature and the result of the same general laws, which have been the groundwork through natural selection of the formation of the most perfectly adapted animals in the world, man included, were intentionally and specially guided.”⁸

Nevertheless, Darwin affirmed his “inward conviction” that “the Universe is not the result of chance.” This put him in “a simple muddle; I cannot look at the universe as the result of blind chance, yet I can see no evidence of beneficent design, or indeed of design of any kind, in the details.” Although he feared that the issue might ultimately be incomprehensible, he was “inclined to look at everything as resulting from designed laws, with the details, whether good or bad, left to the working out of what we may call chance.”⁹

In other words, Darwin was willing to acknowledge that God may have designed the universe and natural laws, but he was convinced that the laws of evolution could not produce designed results. From the viewpoint of Darwinian evolution, no form of life is designed, and human beings — as the latest outcome of an inherently directionless

process — are the least designed of all.¹⁰

With the advent of neo-Darwinism and molecular genetics in the twentieth century, many biologists finally felt they understood the origin of variations. According to modern neo-Darwinism, genes consisting of DNA are the carriers of hereditary information; information encoded in DNA sequences directs the development of the organism; and new variations originate as mutations, or accidental changes in the DNA.

If variations originate in molecular accidents, as neo-Darwinism claims, then the evolutionary process is at least as random as Darwin thought. As molecular biologist Jacques Monod said in 1971, DNA is “the secret of life,” and “with the understanding of the random physical basis of mutation that molecular biology has provided, the mechanism of Darwinism is at last securely founded, and man has to understand that he is a mere accident.”¹¹

So three central claims of Darwinian evolution that are relevant to this discussion are:

(1) All living things are modified descendants of one or a few original forms;

(2) They have been modified primarily by an unguided process of natural selection acting on random variations; and

(3) The specific results of this process are undesigned, and human beings (as the latest product of an unguided process) are the least designed of all.

III. Unification Thought

The Unification Thought view of biological origins is laid out in *Fundamentals of Unification Thought* (Lee, 1991). It is repeated in summary form and combined with a critique of Darwinian evolution in *From Evolution Theory to a New Creation Theory* (Lee, 1996). What follows is a brief overview of the relevant points in those two books.

According to Unification Thought, human beings were created in the image of God. As images of God, human beings have dual characteristics of “*sungsang*” and “*hyungsang*” (roughly translated as internal character and external form) as well as “*yang*” and “*yin*” that reflect analogous characteristics in God Himself. God’s most fundamental characteristic is love, and human beings were created as His children, to enjoy a loving relationship with Him.¹²

God intended human beings to be the center of creation, so He

conceived of them first. Only then did God conceive the ideas of all other things, living and non-living, in the likeness of human beings. God “abstracted and transformed” the idea of human beings in order to conceive the ideas of animals, plants and non-living things, in that order. The process of creation, however, operated in the reverse order, from non-living matter to plants and animals, with human beings coming last. In this way, God prepared a suitable environment before placing human beings in it.¹³

Since God conceived the ideas of all things in our likeness, the human being is a microcosm and shares certain similarities with all other beings. Thus from the viewpoint of Unification Thought, the obvious similarities between us and other living things are a result of common design — not common ancestry, as Darwinian evolution claims.

The process of creation also followed a certain pattern, which Unification Thought describes in terms of the “four-position base.” (Figure 1) The first position is purpose. All beings exist because God has a purpose for them, and this is their ultimate origin. In the act of creating, God’s dual characteristics of *sungsang* and *hyungsang* engage in a subject-object relationship of “*give and receive action*” (the “division” stage), and it is through this action that the result is formed (the “union” stage).¹⁴

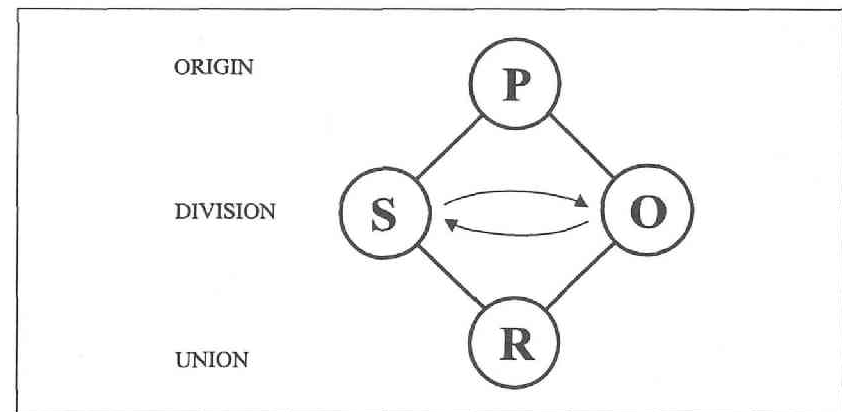


Figure 1. The four-position base: P = Purpose; S = subject; O = object; and R = result. The reciprocal arrows in the middle indicate give-and-receive action.

As the four-position base indicates, all things (including living organisms) originate in a purpose, that is, a plan or ideal.

Furthermore, in the division stage it is always *sungsang*, or internal character (Logos), that leads the *hyungsang*, or external form — though the reciprocal arrows indicate that the latter also provides feedback to the former. As the foundation of Unification ontology, the four-position base describes God's nature and is reflected in all beings, from humans down to atoms. In individual human beings, the origin (purpose) is *shimjung*, or Heart. The spiritual (subject) and physical (object) represent the division stage, and these unite to form the complete person (result).

In addition to *sungsang* and *hyungsang*, all beings (from God down to atoms) have dual characteristics of *yang* and *yin*. In human beings these are manifested as masculinity and femininity. In Unification Thought, male and female thus originate in God's own nature.¹⁵ This is in contrast to Darwinian evolution, which has no adequate explanation for the origin of sex. Obviously, it is much more efficient for one organism simply to divide, as bacteria do, rather than depend on another organism for its reproduction. Biologists have discovered no fitness advantage sufficient to explain sexual reproduction from a Darwinian perspective. In September 1998, the journal *Science* reported that biologists "haven't solved the mystery of sex yet... How sex began and why it thrived remain a mystery."¹⁶ It is not a mystery, however, in the context of Unification Thought.

In Unification Thought, the process of creation took time. The six days of creation in the Book of Genesis are regarded as symbolic rather than literal, and there is no conflict between Unification Thought and Darwinian evolution over the geological time scale.¹⁷

Unification Thought maintains that God created Adam and Eve, our first human ancestors. They were not biologically descended from other animals, though they were immediately preceded by ape-like creatures that according to Unification Thought "were required in the course of creating human beings." One reason for this may have been that Adam and Eve, like all other human beings, had to start out as infants and grow to adulthood. Ape-like creatures could have provided the care and support that two human infants obviously would have needed.¹⁸ So four central claims of Unification Thought that are relevant to this discussion are:

(1) Human beings were created in the image of God, the result of a divine plan rather than an accidental by-product of unguided natural processes;

(2) Humans and other creatures are similar not because the former evolved from the latter, but because the latter were created on the pattern of the former;

(3) The dualities of *sungsang/hyungsang* and *yang/yin* are rooted in God's nature and reflected in all created beings; in humans, these take the form of spiritual/physical and masculine/feminine.

(4) Adam and Eve were specially created by God, not biologically descended from ape-like animals — though the latter were a step in the creation of human beings.

IV. Contradictions Between Unification Thought and Darwinian Evolution

Unification Thought and Darwinian evolution stand in fundamental contradiction to each other. While the latter maintains that living things in general, and human beings in particular, are accidental by-products of natural processes, the former maintains that God planned human beings from the beginning, and then designed all other things to resemble us to varying degrees.

There continues to be controversy over this aspect of Darwinism, with some people insisting that evolution is compatible with design. Whatever these people mean by "evolution," however, it is not what Charles Darwin meant. It is clear from the writings of Darwin himself that he regarded every specific outcome of the evolutionary process — from structures and organs to entire species and kingdoms — as undesigned. Anyone who claims to see design in evolution is taking a position other than Darwin's.¹⁹

This point has been forcefully made by many of Darwin's modern followers. For example, Oxford biologist Richard Dawkins has written: "All appearances to the contrary, the only watchmaker in nature is the blind forces of physics, albeit deployed in a very special way. A true watchmaker has foresight: he designs his cogs and springs, and plans their interconnections, with a future purpose in his mind's eye. Natural selection, the blind, unconscious, automatic process which Darwin discovered, and which we now know is the explanation for the existence and apparently purposeful form of all life, has no purpose in mind."²⁰

As the phrase "we now know" reveals, Dawkins considers the case closed. "It is absolutely safe to say," he wrote, "that if you meet somebody who claims not to believe in evolution, that person is ignorant, stupid or insane (or wicked, but I'd rather not consider that)." Thus "the theory of evolution by cumulative natural selection is the only theory we know of that is in principle *capable* of explaining the existence of organized complexity." It also clear that this has

theological implications for Dawkins: "Although atheism might have been logically tenable before Darwin, Darwin made it possible to be an intellectually fulfilled atheist."²¹

Tufts University philosopher Daniel Dennett makes similar points. "Darwin's dangerous idea," he wrote in 1995, "cuts much deeper into the fabric of our most fundamental beliefs than many of its sophisticated apologists have yet admitted, even to themselves... Darwin's idea [bears] an unmistakable likeness to universal acid: it eats through just about every traditional concept, and leaves in its wake a revolutionized world-view." Thus "evolutionists who see no conflict between evolution and their religious beliefs have been careful not to look as closely as we have been looking, or else hold a religious view that gives God what we might call a merely ceremonial role to play."²²

According to Dennett, this means that society has a duty to teach our children that traditional religious views (such as theism) are false: "Those whose visions dictate that they cannot peacefully coexist with the rest of us we will have to quarantine as best we can... If you insist on teaching your children falsehoods — that the Earth is flat, that 'Man' is not a product of evolution by natural selection — then you must expect, at the very least, that those of us who have freedom of speech will feel free to describe your teachings as the spreading of falsehoods, and will attempt to demonstrate this to your children at the earliest opportunity. Our future well-being — the well-being of all of us on this planet — depends on the education of our descendants. What, then, of all the glories of our religious traditions? They should certainly be preserved, as should the languages, the art, the costumes, the rituals, the monuments. Zoos are now more and more being seen as second-class havens for endangered species, but at least they are havens, and what they preserve is irreplaceable... What will happen, one may well wonder, if religion is preserved in cultural zoos, in libraries, in concerts and demonstrations?"²³

The fundamental contradiction between Unification Thought and Darwinian evolution on the issue of God and design leads to a reversal in the order of causation. In Unification Thought, living things originate in God and His purpose. Then a *give-and-receive* relationship between internal form (in the subject position) and external form (in the object position) produces the organism.

In Darwinian evolution, the organism comes first, and its sole "purpose" is survival. The external environment (struggle for survival in the face of limited resources) then acts on internal constraints (random variations, with new ones arising from genetic mutations) to produce something new. The only role God might play in the

Darwinian scheme is as a product of human imagination, which is itself an accidental by-product of the evolutionary process. From a Darwinian perspective God is not the creator of Man, Man is the creator of God.

The stark difference between Darwinian evolution and Unification Thought can be illustrated using the four-position base. The positions of purpose, subject, object and result are completely opposite in the two perspectives. (Figure 2)

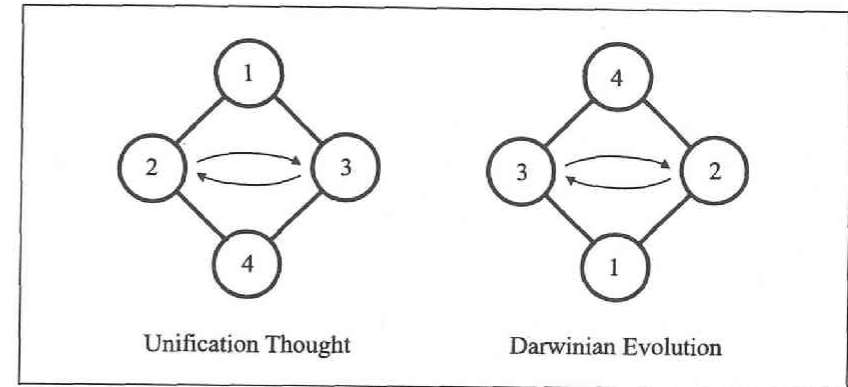


Figure 2. 1 = God/mind/idea; 2 = Internal; 3 = External; 4 = Individual organism

So Darwinian evolution fundamentally contradicts Unification Thought. Both cannot be true. Disproving one of two contradictory views cannot, of course, validate the other; but if one view is confirmed by scientific evidence, the other view is untenable. Darwinists claim that their view is confirmed by overwhelming evidence. If so, then Unification Thought must be rejected. So we need to ask whether the scientific evidence confirms Darwinian evolution.

IV. Evidence Against Darwinian Evolution

Darwinian evolution derives its present cultural power from the widespread belief that it is scientific — that is based on solid evidence and thus accurately represents reality. Yet, despite the exaggerated claims of Darwinists, there is no "overwhelming evidence" for Darwinian evolution. Indeed, the more biologists learn the more implausible the theory becomes. This is true for both of the major aspects of the theory, universal common ancestry and the mechanism of natural selection acting on random variations.

Universal common ancestry is the claim that all living things are modified descendants of one or a few original forms. Limited common ancestry is not in dispute: No one doubts, for example, that all human beings are modified descendants of some original human beings. The question is not whether members of an existing species are related through descent with modification, but whether all species are so related. Evidence that is usually cited in support of universal common ancestry includes the fossil record, molecular comparisons, embryological patterns, and homologies. Taking the animal kingdom as an example, however, we can see that all of these categories of evidence fall far short of supporting Darwinian evolution, and they even contradict it in some respects.

For example, the geologically abrupt appearance of many of the major animal groups (phyla and classes) in the Cambrian explosion is inconsistent with the gradual branching pattern one would expect if Darwin's theory were true. Darwin himself acknowledged that the Cambrian explosion was a "serious" problem that "may be truly urged as a valid argument against" his theory²⁴, and subsequent research has shown that it was even more dramatic and extensive than Darwin realized. Paleontologists James Valentine and Douglas Erwin wrote in 1987 that the "explosion is real; it is too big to be masked by flaws in the fossil record."²⁵ A recent article by information theorist Stephen C. Meyer in *Proceedings of the Biological Society of Washington* argues that the origin of new information in the Cambrian explosion cannot be explained in the context of Darwinian theory, but only in the context of the theory of intelligent design.²⁶

Even if the fossil record were more consistent with Darwin's branching-tree pattern, it would still be incapable of confirming universal common ancestry. The problem is that fossils, by their very nature, cannot tell us anything about ancestor-descendant relationships. Darwinian biologist (and Chief Science Writer for Nature) Henry Gee described the problem in his 1999 book, *In Search of Deep Time*. "No fossil is buried with its birth certificate," he wrote, and "the intervals of time that separate fossils are so huge that we cannot say anything definite about their possible connection through ancestry and descent." He concluded: "To take a line of fossils and claim that they represent a lineage is not a scientific hypothesis that can be tested, but an assertion that carries the same validity as a bedtime story."²⁷

Modern Darwinists, aware of the problems with the fossil record, have relied increasingly on molecular comparisons to construct "phylogenetic trees" that supposedly represent evolutionary relation-

ships among organisms. Molecular phylogenies, however, contain many anomalies. For example, molecular phylogenies based on 18s RNA conflict with phylogenies based on morphology, with phylogenies based on 28s RNA, and even with phylogenies based on 18s RNA constructed by different laboratories. According to Darwinian biologist Michael Lynch, "Clarification of the phylogenetic relationships of the major animal phyla has been an elusive problem, with analyses based on different genes and even different analyses based on the same genes yielding a diversity of phylogenetic trees."²⁸

Darwin himself, aware of the problems with the fossil record and unaware of modern molecular techniques, thought that embryology provided the best evidence for his theory that all vertebrates are descended from a common ancestor. "It seems to me," he wrote in *The Origin of Species*, "the leading facts in embryology, which are second to none in importance, are explained on the principle of variations in the many descendants from some one ancient progenitor." And those leading facts, according to him, were that "the embryos of the most distinct species belonging to the same class are closely similar, but become, when fully developed, widely dissimilar." Reasoning, "Community in embryonic structure reveals community of descent," Darwin concluded that early embryos "show us, more or less completely, the condition of the progenitor of the whole group in its adult state." In other words, similarities in early embryos not only demonstrate that they are descended from a common ancestor, but they also reveal what that ancestor looked like. Darwin considered this "by far the strongest single class of facts in favor of" his theory.²⁹

Patterns of development in vertebrate embryos, however, are not what Darwin thought they were. Vertebrate embryos actually start out looking very different from each other; they become somewhat similar midway through development, then they diverge again as they approach hatching or birth.³⁰ (For details, see Appendix, below.) If we were to base inferences of ancestry on similarities and differences in embryos, we would have to conclude that vertebrates do not share a common ancestor.

In actuality, all of the evidence from the fossil record, molecular comparisons and embryology relies on similarities and differences in various organisms — in other words, homology. According to Darwin, features in different organisms are homologous because they were inherited from a common ancestor. The biologists who described homology a decade before Darwin, however, attributed it to construction or creation on a common archetype or design. How can one determine whether homology in living things comes from common

ancestry or common design?

Simply pointing to the similarities themselves won't do, as biologist Tim Berra inadvertently showed when he used different models of Corvette automobiles to illustrate descent with modification in his 1990 book, *Evolution and the Myth of Creationism*. Berra wrote that "descent with modification is overwhelmingly obvious" in Corvettes³¹, but we all know that automobile similarities are due to common design rather than common ancestry. Only by demonstrating that a Corvette can morph into another model by natural processes could someone rule out the need for a designer. Analogously, the only scientific way to demonstrate that similarities in living things are due to common ancestry would be to identify the natural mechanism that produced them.³²

So the evidence for universal common ancestry ultimately relies on the evidence for the mechanism of Darwinian evolution: natural selection acting on random variations (genetic mutations, in the modern version of the theory). Darwin himself had no evidence for natural selection, so he had to depend on evidence from domestic selection that he extrapolated to make his case. The first real evidence from nature came almost a century after *The Origin of Species* and involved peppered moths. Before 1800, most peppered moths were light-colored, but during the industrial revolution they became mostly dark-colored ("melanic") — a phenomenon known as "industrial melanism." The change was attributed to natural selection: Since darker moths were better camouflaged on pollution-darkened tree trunks the lighter moths (it was claimed) were preferentially eaten by predatory birds. In the early 1950s, British physician Bernard Kettlewell performed some experiments in which he released captive moths onto nearby tree trunks and watched as birds ate the less-camouflaged ones. The peppered moth story, complete with photographs showing light- and dark-colored moths on light and dark tree trunks, soon found its way into most biology textbooks as the classic story of natural selection in action. The peppered moth story has now been largely discredited, however. Biologists in the 1980s discovered that the moths only rarely rest on tree trunks, and it turned out that all the textbook photographs had been staged.³³

Better evidence for natural selection came from research in the 1970s and 1980s on finches in the Galapagos Islands. Biologists Peter and Rosemary Grant observed that the average beak size in one species increased about 5% after a severe drought, because birds with smaller beaks were unable to crack the few tough seeds that survived the dry spell. By extrapolating the 5% increase, the Grants concluded

that continued change might produce a new species in only 200 years. But once the rains returned, the average beak size returned to normal, so no net evolution occurred.³⁴

Clearly, natural selection occurs; but there is no observational evidence that it can produce new species. The evidence for genetic mutations as the raw materials for natural selection is no better.

The most abundant evidence for genetic mutations comes from research on bacteria, because their small size and short generation times make it easy to experiment with many organisms, and because they can be exposed to potent mutagens and strong selection. Rare beneficial mutations do occur, but these are strictly biochemical changes affecting only single molecules. There are no known beneficial mutations that produce new structures, organs, or body plans, and no mutations have ever been observed to produce new species.

Bacteriologist Alan Linton wrote in 2001: "But where is the experimental evidence [for Darwin's theory]? None exists in the literature claiming that one species has been shown to evolve into another. Bacteria, the simplest form of independent life, are ideal for this kind of study, with generation times of 20 to 30 minutes, and populations achieved after 18 hours. But throughout 150 years of the science of bacteriology, there is no evidence that one species of bacteria has changed into another in spite of the fact that populations have been exposed to potent chemical and physical mutagens and that, uniquely, bacteria possess extrachromosomal, transmissible plasmids. Since there is no evidence for species changes between the simplest forms of unicellular life, it is not surprising that there is no evidence for evolution from prokaryotic to eukaryotic cells, let alone throughout the whole array of higher multicellular organisms."³⁵

Probably no one has come closer to producing new species of bacteria than biologist Richard E. Lenski. But Lenski has only been able to produce "an incipient genetic barrier between formerly identical lines"? a barrier, which he admits, is "much smaller than the barrier between... clearly distinct species."³⁶

This hardly constitutes confirmation of Darwinian evolution, which requires much more than minor biochemical changes within existing species. After all, Darwin titled his magnum opus *The Origin of Species, not How Existing Species Change Over Time*.

So the two principal elements in Darwinian theory, universal common ancestry and modification by natural selection, are not well supported by scientific evidence. Indeed, much of the evidence is inconsistent with Darwinian theory. This includes the geologically abrupt appearance of major animal phyla in the Cambrian explosion,

divergent patterns of early development in vertebrate embryos, and the observed inability of natural selection and genetic mutations to produce new species, organs, or body plans. Although the critique of Darwinian evolution in Unification Thought Institute's *From Evolution Theory to a New Creation Theory* could be improved (see Appendix, below), the critique is sound.

APPENDIX

Although the critique of Darwinian evolution set forth in *From Evolution Theory to a New Creation Theory* (and, to a lesser extent, in *Fundamentals of Unification Thought*) is basically sound, there are a few areas in which it could be improved and made stronger. These areas include the origin of life, vertebrate embryology, and the role of DNA. In each area, it seems, *From Evolution Theory to a New Creation Theory* has incorporated certain claims made by Darwinists that do not fit the evidence. The actual evidence makes the case against Darwinism even stronger.

1. Origin of Life

From Evolution Theory to a New Creation Theory states: "The air surrounding the Earth contains [water] vapor, hydrogen, ammonia, methane, nitrogen, and so forth: the actions of ultraviolet rays and natural electric discharge (lightning) formed amino acids, the bases of nucleic acids, organic acids, and so forth. These were dissolved in the oceans, and formed a 'soup of organic substances,' as it is called. That was the very material from which cells were made." Furthermore:

"Through experiments conducted by S. L. Miller (1930-) in 1953, it has been confirmed that amino acids can be generated through a discharge of electricity into a gas mixture of steam, hydrogen, ammonia, and methane; furthermore, we now know that other chemical compounds also can be synthesized the same way."³⁷

In fact, Miller's experiment is no longer regarded as geologically relevant. Since the 1960s, most geochemists have been convinced that the Earth's early atmosphere never contained a significant concentration of reducing gases such as hydrogen, methane and ammonia. Hydrogen, being too light to be retained by Earth's gravity, would have escaped into space, and in the absence of excess hydrogen sunlight would have destroyed most of the methane and ammonia. Most probably, the Earth's early atmosphere consisted mainly of the

same gases emitted by modern volcanoes: nitrogen, carbon dioxide and water vapor.³⁸

If Miller's 1953 experiment is repeated with these volcanic gases, however, no amino acids are produced — as Miller himself has acknowledged. Even glycine, the simplest amino acid, is produced only if the concentration of hydrogen in the apparatus is greater than the concentration of carbon dioxide; and other amino acids are not produced unless a significant concentration of methane is present.³⁹ These conditions are unlikely to have occurred in the early Earth's atmosphere.

There is also no geological evidence that a primordial "soup of organic substances" ever existed; and the biochemical evidence makes such a "soup" highly unlikely, since key organic molecules would have broken down in the ocean much faster than they could have been produced in the atmosphere.

We read in *Fundamentals of Unification Thought* "scientists now assert they have reached the stage where they can create life."⁴⁰ Obviously, this boast by the scientists is groundless. As *New York Times* science writer Nicholas Wade reported in 2000: "Everything about the origin of life on Earth is a mystery, and it seems the more that is known, the more acute the puzzles get."⁴¹ The doctrine that God created life has nothing to fear from origin-of-life research, which is as far from solving the problem now as it has ever been.

A thought experiment might help here. If we were to take a small test tube filled with sterile buffer at just the right pH, place one cell in it, and poke a hole in the cell membrane with a sterile needle, we would have all the molecules necessary to form a living cell, in the correct proportions. Yet every biologist knows we would be unable to put the cell back together again. Even if origin-of-life researchers could account for the prebiotic production of every molecule necessary for life, they would still be unable to make a living cell.

2. Vertebrate Embryology

From Evolution Theory to a New Creation Theory states: "When the embryos of vertebrates are compared with one another, all of them resemble one another in their early stages of development: All of them have gill slits and a tail, and all have a fishlike heart with a single atrium and ventricle. Based on that, evolutionists claim that embryos, in the course of development, repeat the evolutionary history of their ancestors in some abbreviated form. This is the theory of recapitulation, advocated by E. Haeckel (1834-1919), according to

which 'ontogeny recapitulates phylogeny'." 42

The book goes on to point out, correctly, that the alleged "gill slits" are actually pharyngeal pouches that develop into gills only in fish. 43 It also argues: "The likeness in the growth of embryos of various kinds of organisms does not prove the footprint of evolution. When we say that living beings were created in the likeness of a human being, we imply that the process of growth of each one of them is also modeled after the process of growth of the human embryo. Therefore, the process of growth of the human embryo is a synthesis of the processes of growth of all other organisms' embryos (see Fig. 20)." 44

Although there is nothing logically wrong with this argument, it presupposes that Darwinists are reporting the evidence accurately when they tell people that vertebrate embryos resemble each other in their early stages. But this is not the case. Figure 20 in *From Evolution Theory to a New Creation Theory* is actually based on faked drawings by Ernst Haeckel. Haeckel selected only those classes and orders of vertebrates that came closest to fitting his theory of recapitulation, and then he systematically exaggerated their similarities to provide support for his theory. A study of actual vertebrate embryos published in 1997 showed that Haeckel's drawings seriously misrepresented the truth. 45

The first author of the 1997 study, embryologist Michael K. Richardson, stated: "It looks like it's turning out to be one of the most famous fakes in biology." 46

In 2000, Stephen Jay Gould called Haeckel's drawings "fraudulent" and wrote: "We do, I think, have the right to be both astonished and ashamed by the century of mindless recycling that has led to the persistence of these drawings in a large number, if not a majority, of modern textbooks." 47

Not only did Haeckel select embryos to fit his theory and then distort them further (see Figure A), but he also completely ignored the earliest stages of vertebrate development (see Figure B). In their earliest stages, vertebrate embryos are quite dissimilar, and their dissimilarities have long been known to embryologists. As William Ballard wrote in 1976, it is "only by semantic tricks and subjective selection of evidence," by "bending the facts of nature," that one can argue that vertebrate embryos in their earliest stages "are more alike than their adults." 48

The fact that Haeckel faked his drawings, and that vertebrate embryos actually look very dissimilar in their earliest stages, seriously weakens the Darwinian claim that vertebrate embryology points to common ancestry. It does not, however, weaken Unification

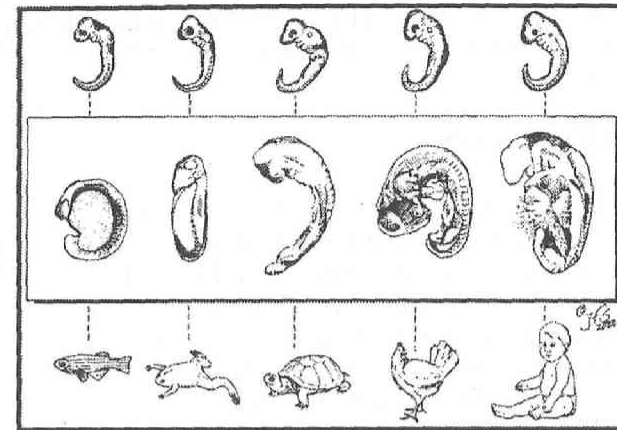


Figure A

Top row: Haeckel's drawings. Middle Row: Drawings of actual embryos. (From Wells, 2000a; © Jody F. Sjogren)

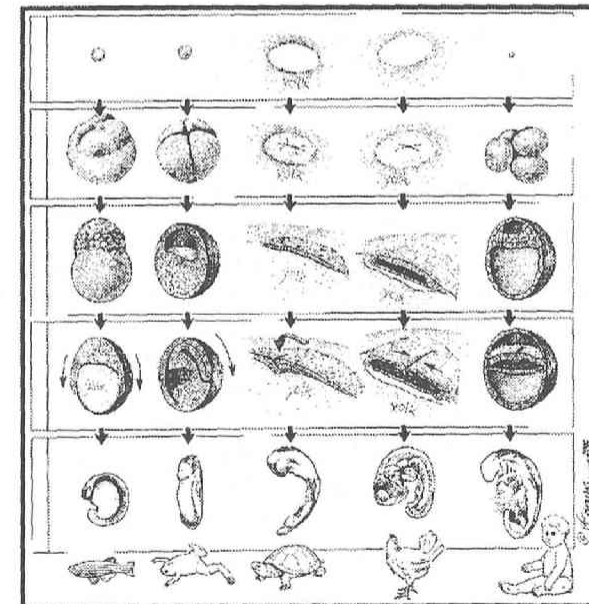


Figure B

Earlier stages of the same five embryos, from fertilized egg through gastrulation. (From Wells, 2000a; © Jody F. Sjogren)

Thought. If the various classes of vertebrates were created by abstracting and transforming the design of humans, there is nothing constraining the creator to follow the same developmental pathways in each class.

3. The Role of DNA

We read in *Fundamentals of Unification Thought*: "Each person's DNA is different because the Individual Image, which exists within God, dwells in the chromosomes in the form of DNA... The DNA (deoxyribonucleic acid) contained in the chromosomes of a cell contains four kinds of nitrogenous bases, namely, adenine, guanine, cytosine, and thymine. The arrangements of these four kinds of bases form the genetic information of a cell, which can be called the blueprint of a living organism. The structure and functions of a living organism are determined by this genetic information. Therefore, it can be said that living things, ultimately, are made through the DNA... The universe is a life-field; it is filled with life. Life originates from God's *Sungsang*. When there is a device that is capable of seizing life, then, and only then, can life appear? What corresponds to that device is precisely the special molecule called DNA."⁴⁹

Similarly, in *From Evolution Theory to a New Creation Theory* we find: "It is the function of the genes (DNA) that makes the eggs of a frog grow into frogs, and the eggs of a chicken, into chickens... God made Logos dwell within the cell, so that the cell might grow according to Logos. The Logos that dwells within the cell is nothing but the genetic code of DNA... According to Unification Thought, when a new species is created, God's power works to bring about an abrupt change. In such an occasion, God causes an abrupt change according to Logos (blueprint). How is that carried out? In biological terms, this matter relates to the rearrangement of the genetic code, or to a change in the program of the genetic code."⁵⁰

Although the basic principles elucidated in these passages are not a problem (i.e., the concepts of Individual Image and Logos, and the idea that the formation of new species requires God's creative input), these passages reflect an over-emphasis on DNA that is inconsistent with the biological evidence. The over-emphasis on DNA is encouraged by neo-Darwinism, because if DNA controls development then mutations in DNA can provide raw materials for evolution. This is why neo-Darwinist Jacques Monod (quoted above) called DNA "the secret of life," and announced that "with the understanding of the random physical basis of mutation that molecular biology has

provided, the mechanism of Darwinism is at last securely founded, and man has to understand that he is a mere accident."⁵¹

But there is mounting evidence that DNA does not contain the entire program for development. All its "programs" are protein sequences; it doesn't even determine the three-dimensional form those proteins take, and which they need in order to function properly. In the words of cell biologist H. F. Nijhout: "The network or pattern of gene activation does not constitute a program; it is both a consequence of, and a contributor to, development... The simplest and also the only strictly correct view of the function of genes is that they supply cells, and ultimately organisms, with chemical materials."⁵²

From a biological viewpoint, it is more correct to compare DNA to a list of building materials for a house. Such materials are necessary, but far from sufficient, since any number of different houses can be constructed using the same set of materials. What one needs in addition to the materials is a floor plan and assembly instructions, and the floor plan and assembly instructions for a multicellular organism are distributed throughout the fertilized egg rather than localized in the DNA. Other carriers of heritable development information in the cell include the cytoskeleton and membrane patterns.⁵³

Criticisms of a DNA-centered view of living organisms are not new, as historian Jan Sapp has shown.⁵⁴ But the evidence that DNA is just one locus of information in the cell is growing, as several recent books have documented.⁵⁵ Therefore, to avoid linking fundamental philosophical concepts to outdated science, Unification Thought would do well to locate the Individual Image and Logos in whatever internal aspects of an organism determine its form. Those internal aspects are presently unknown — partly because neo-Darwinism has discouraged research into them. It can be hoped that future research, unfettered by neo-Darwinism, will shed light on them. As *From Evolution Theory to a New Creation Theory* points out, the manner in which God has "changed programs in organisms is a problem to be solved in the future — but the day will come when this question will be clarified through the results of scientific research."⁵⁶

4. Concluding Remarks

All three of the problems highlighted above are based on falsehoods that have been promoted by Darwinists. The problems affect examples used to illustrate Unification Thought, but they do not indicate flaws in Unification Thought itself. If anything, the problems

indicate that those who formulated Unification Thought trustingly gave the benefit of the doubt to Darwinian scientists who are more committed to a materialistic worldview than to the scientific evidence. As Darwinists (like Marxists) increasingly lose their credibility, these problems should subside.

Notes

- 1) Lee, 1996, p.8
- 2) Darwin, 1859, Introduction, Ch. XV
- 3) F. Darwin, 1887, vol. II, p.202
- 4) Gillespie, 1979; Johnson, 1991
- 5) F. Darwin, 1887, vol. II, p.217
- 6) F. Darwin, 1887, vol. I, pp.278-279
- 7) Gray, pp. 84-86, 148, 155-157
- 8) Darwin, 1868, vol. II, pp.514-516
- 9) F. Darwin, 1887, vol. I, pp. 282, 285; vol. II, pp. 105-106; F. Darwin and Seward, 1903, vol. I, p.321
- 10) Wells, 1988, 1991b
- 11) Quoted in Judson, 1979, pp. 216-217
- 12) Lee, 1991, pp. 15-16, 26-27, 32; Lee, 1996, pp.60-62
- 13) Lee, 1991, pp. 59-63; Lee, 1996, pp. 62-67, 72-74
- 14) Lee, 1991, pp. 44-51
- 15) Lee, 1991, pp. 68-69, 116-117; Lee, 1996, pp. 35, 76-78
- 16) Wuethrich, 1998, pp. 1980-1982. See also Hines & Culotta, 1998; Barton & Charlesworth, 1998
- 17) Lee, 1991, pp. 98-99; Lee, 1996, p. 75
- 18) Lee, 1996, pp. 75-77
- 19) Gillespie, 1979; Wells, 1988; Wells, 1991a; Wells, 1991b
- 20) Dawkins, 1986, p. 5
- 21) Dawkins, 1989, p. 34; Dawkins, 1986, pp. 6, 317
- 22) Dennett, 1995, pp. 18, 63, 310
- 23) Dennett, 1995, pp. 519-520
- 24) Darwin, 1859, Ch. X
- 25) Valentine & Erwin, 1987, pp. 84-85
- 26) Meyer, 2004
- 27) Gee, 1999, pp. 23, 113, 116-117
- 28) Lynch, 1999, p. 323
- 29) Darwin, 1859, Ch. XIV; Darwin, 1871, Ch. I; F. Darwin, 1887, II:131

- 30) Wells, 1999a; Wells, 2000a. Ch. 5
- 31) Berra, 1990, p. 117
- 32) Wells & Nelson, 1997; Wells, 2000a, Ch. 4
- 33) Wells, 1999b; Hooper, 2002
- 34) Wells, 2000a, Ch. 8
- 35) Linton, 2001.
- 36) Vulic et al., 1999
- 37) Lee, 1996, pp. 32, 70-71
- 38) Abelson, 1966; Fox & Dose, 1977; Mills et al., 1993; Cohen, 1995; Wells, 2000a
- 39) Schlesinger & Miller, 1983
- 40) Lee, 1991, pp. 65-66
- 41) Wade, 2000
- 42) Lee, 1996, p. 58
- 43) Lee, 1996, p. 60
- 44) Lee, 1996, pp. 62-64
- 45) Richardson et al., 1997
- 46) Quoted by Pennisi, 1997
- 47) Gould, 2000
- 48) Ballard, 1976; Wells, 1999a
- 49) Lee, 1991, pp. 30, 65-66; see also pp. 365-367
- 50) Lee, 1996, pp. 22, 42, 51-55.
- 51) Quoted in Judson, 1979, pp. 216-217
- 52) Nijhout, 1990
- 53) Wells, 1992; Wells, 2001
- 54) Sapp, 1987
- 55) Webster & Goodwin, 1996; Harold, 2001; Moss, 2003; Muller & Newman, 2003
- 56) Lee, 1996, p. 56

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Intelligent Design Theory and Unification Thought

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I

My aim in this essay is to attract people's attention to what is called Intelligent Design Theory — a scientific theory and movement not known as yet to everybody, but which is now hotly debated and gathering strength in America and other places; to explicate what it is all about, as far as I can; and to show how this theory (movement) is unwittingly supporting and validating Unification Thought.

The concept 'design' of this theory, while remaining within the realm of science, necessarily entails the existence of a Designer, a supernatural agent, and also a teleological point of view, which has long been a taboo in the scientific community.

Significantly, all these are ideas central to Unification Thought, which unifies everything physical and metaphysical into an organic whole, under the concept of God's design and purpose of creation. This design movement, though revolutionary, seems to me inevitable in the course of human history, tending toward the unification of science and theology.

Since these two theories share the same fundamental idea — though one is a scientific theory, and the other a theory founded on revealed truth, I would suggest that the proponents of design theory would profit a great deal by the study of Unification Thought. They may be doubtful of it, but so long as design theory is not a closed theory incapable of further development, I think they can learn from it and find something in it to make them confident of their own theory.