Philosophical Essay

EVOLUTIONISM: AN OXYMORON

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Abstract

The concept of evolutionism—creation by evolution—is an illusion of the intellect and an exercise in illogic. It is a fundamental contradiction, an oxymoron. For creation means genesis from nothing, from nothingness, from the void, whereas evolution means that there must be a starting point, a point of reference or point of departure, from something. This paper attempts to expose this logical contradiction.

Introduction

The philosophical arguments about creation versus evolution are joined within the recesses of the mind rather than fought over hard evidence. As the saying goes, a fact is not the truth. It is here, therefore, and further afield, that the controversy is to be pursued. It is as well an issue involving the ignorance and bias of the media, who are captivated by the aura of intellectualism, call it humanism, secularism, relativism, rationalism, or scientism. And who believe that everything can be solved by reason, by the intellect, only to find out that there is no such thing, for it is all only in the mind.

To state the obvious, it is first and foremost an ideological *embrouillement*, a confrontation in perspectives and worldviews. Such scientific arguments as there are, are only incidental, and are subject to the limitations and validity inherent in science and logic. Nevertheless, these same limitations lie at the crux of the controversy and its resolution.

The term evolution is, in general usage, generalized to mean evolutionism. In the ordinary sense of the word, however, evolution merely denotes *change* in something. It is of common everyday occurrence. Simple evolution, therefore, is a given, for everything *evolves.*

It is with changes in what we call species that the trouble begins. By species the macro-view is hereby adopted, that a species denotes a grouping of specimens which interbreed or are presumably capable of interbreeding. A species group may be further divided into subspecies, kinds, varieties, races, or yet other appellations. Are these species changes to be regarded as time-continuous, or regarded as time-discrete? That is, do discontinuities occur with time? And furthermore, are there time gaps in the fossil record? We find in fact that minor discrete changes-called speciation—may occur within a species group, and be referred to as a mutation, natural or induced. Between species which are not too dissimilar, or not too diverse, there may be a limited interbreeding—i.e., hybridization. This is aside from the more major issues of biogenesis and abiogenesis which, nonetheless, must still be referenced to some starting point.

There is no doubt, as is continually reinforced, that evolutionism is the "politically correct" mode. The proponents cannot know why they believe, but know they had better. The rhetoric is self-sustaining and the semantics nonending. But what we are concerned with here is *genesis,* period, from nothing or nothingness.

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Evolutionism Properly Stated

In the strict sense of the word, what is meant by the term *evolutionism* is creation by evolution. As such, the term forms a fundamental contradiction or oxy*moron.* Creation pertains to genesis from nothingness, from the void, whereas evolution requires a starting point, a point of departure. Thus creation and evolution are mutually exclusive and irreconcilable. A philosophical way of saying it is that evolutionism, or creation by evolution, is an inadmissible or nonallowable proposition or judgment.

In the many forays into creationism versus evolutionism, the arguments in favor of the latter viewpoint generally revolve around inferences and conjectures. It is perhaps the supreme example of Platonism, where the idea is judged more important than the facts. The counter view, successfully reinforced by such organizations as the Creation Research Society and the Institute for Creation Research, is that the evidence is quite to the contrary, which is conveniently ignored by the major media. The experimental observations in nature simply are not supportive of evolutionism. In requiring that inference and conjecture be replaced by hard data, the subject becomes what is called *cladistics,* or "I'm from Missouri, so show me."

The proper business of science should be to report only what is seen or evidenced. The interpretation is the proper domain of the metaphysical, theological, or religious. These criteria are akin to the philosophical bent known as Positivism.

This contrary viewpoint is set forth by no less than Oswald Spengler who, in *The Decline* of *the West,* asserts that "There is no more conclusive refutation of Darwinism than that furnished by palaeontology" (Spengler, II, p. 32). The paleontological record is simply that species emerge, exist largely unchanged, then disappear. This is followed in turn, after gaps in time, by the emergence of new and distinct species. These assertions by Spengler remain as definitive today as yesterday, in spite of the popular use of such verbal and symbolic prestidigitations as missing links and punctuated equilibria. These are in essence merely semantic devices used in the futile attempt to explain the unexplainable. The use of the expression "abrupt" disappearance or appearance, can be interpreted as an indirect way to admit creation without actually saying so. We might better speak of the

evolution of created species, a perspective which will probably appeal to no one.

The Economic Basis for Darwinism

It has been advanced, but not publicized, that Darwinism is rooted in economics. Thus Spengler noted the latent political element in Darwinism (Spengler, I, p. 369). Jeremy Rifkin, in Algeny (p. 31), observed that the on-going mal-distribution of wealth during the industrial revolution was justified by Darwinism. This is echoed in the title of Darwin's exercise, *On the Origins of Species by Means of Natural Selection, or the Preservation of FAVOURED RACES in the Struggle for Life* (capitals added). F. A. Hayek, in *The Fatal Conceit* (p. 24), has commented that "Darwin got his basic idea from economics," courtesy of reading Adam Smith. Even Bertrand Russell regarded Darwin's theory as but the application of laissez-faire economics to the animal and vegetable kingdom. Furthermore, it promoted a belief in racism, evidenced in British and American anthropological circles, as described more fully by Roger Lewin in *Bones of Contention* (pp. 54-55).

There were still other echoes. Will Durant, in *The Story of Philosophy* (1961, p. 302), remarked that the growing military and industrial might of Germany prior to World War I found a philosophy and a voice in Darwinism and in Nietzsche. Whereas Christianity could not justify the arbitrariment of war, Darwinism could, along with Nietzsche's "will to power." The concept of evolutionism, to say the least, has some dirty linen.

The Requirements To Be Called "Science"

There is the attempt to categorize evolutionism as "science." But as recognized by Emmett L. Williams in *Thermodynamics and the Development of Order* (p. 13), evolutionism is not science, indeed cannot be. For again, in the strict sense of the word, science is more than just classification and systemization. For to be called science, the experiments and observations must be *repeatable* and *reproducible*. That is, the experiments or phenomena must be repeatable, and the observations or results or data must be reproducible. This requirement was enunciated by Friedrich Georg Juenger in his book translated as *The Failure of Technology* (p. 109).

This requirement of repeatability and reproducibility is in fact basic to natural philosophy, now referred to as mathematical physics. It is embodied in planetary motion, which is reproduced in the form of Kepler's Laws of Planetary Motion. In turn, the mathematical transformation of Kepler's laws will yield the various other forms for the laws of motion, including the Lagrangean and Hamiltonian forms, and the energy functions. The mathematics is detailed by E. J. Hoffman in *Analytic Thermodynamics: Origins, Methods, Limits, and Validity*. Similar statements apply to the relationships of thermodynamics whereby a change in temperature with respect to pressure, the Joule-Thomson effect, can be used to generate heat functions, also called enthalpy functions, in terms of temperature and pressure.

Contrarily, experiments and phenomena which cannot be repeated and the data reproduced, are *not* science. This includes everything of a historical nature—the entire historical, archeological, and paleontological record. (Unless we choose to think that some tricks can be played with time—such as that time can be reversed and repeated.) Subjects such as geology and astronomy are science only in the sense of their immediate experimental observations, which can be repeated and reproduced. Reflections, inferences, and conjectures about the historic and prehistoric past are *not* science. As Voltaire quipped, history is only a trick we play on the dead. And as Will Durant (1931, p. 106) once ventured, in his paraphrase of Spengler, science like history, is *une fable convenue*, a fable agreed upon.

There is another thing about science which should be considered, and that is the fact that its terms or terminology cannot be defined absolutely. Thus, as cited by Max Jammer in *Concepts of Space* (p. 184), Hermann Grassmann's words, written in 1844, have not yet been disproved:

> The concept of space can in no way be produced by thought, but always stands over against it as a given thing. He who tries to maintain the opposite must undertake the task of deducing the necessity of the three dimensions of space from the pure laws of thought, a task whose solution presents itself as impossible.

And similarly for such fundamental concepts as mass and time: they can be measured but not explained. The fact that genesis or creation cannot also be "scientifically" explained either should come as no surprise.

Tautologies versus Error

These various mathematical manipulations produce tautologies, which are merely a different way to say or express the same *exact* thing. This is true, providing that the mathematics or calculus used is in itself tautological. Thus, as Eric Temple Bell noted in his *Men of Mathematics* (p. 155), the Lagrangean forms for the equations of motion have been called but platitudes, a perfect example of getting something out of nothing. It is similar with the energy forms, yet another way to express the results of experiment, in this case the laws of motion or Kepler's laws.

The well-known Pythagorean theorem is an example of a tautology, denoting but a different way to arrange the parts (triangles) of a square. Euclid's geometry carries the notion of tautologism: is a straight line the shortest distance between two points, or is the shortest distance between two points a straight line? This subject is revived by Davis and Hersh in *The Mathematical Experience* (p. 218). Archimedes' principle, that the weight of fluid displaced by a body is equal to the weight of the body, is also being but a different way to measure the specific gravity of the fluid.

Aristotle's famous tripartite syllogism of major premise, minor premise, and conclusion is tautological, as has long been noted, a fact recorded by Will Durant (1961, p. 50). That is, the conclusion is buried in the premise, or vice versa.

Tautologisms also occur in the use of words, for instance in William James' comment that we are afraid because we run. Here, "run" and "afraid" are

used tautologically. "It's not over till it's over" is another example.

The fundamental axioms of arithmetic, also called the counting process, merely constitute a set of tautologies. Thus writing, say, that 3 + 2 = 5 or 1 + 4 = 5, only states two different ways to arrange five objects or entities, whatever "five" is.

As to the rest of mathematics, itself, the subject is in disarray, as embodied in the title of Morris Kline's book *Mathematics: The Loss of Certainty* (1980). Once accepted as infallible, the operations and exercises of mathematics have become suspect. Richard von Mises has observed that pure mathematics is nothing more than a system of tautologies and conventions (von Mises, p. 125). This is reinforced by the work of the logician Ludwig Wittgenstein, who found that many of the famous theorems of mathematics are but tautologies, being but another way to state the very same exact thing. Moreover, to speak of meaning is to speak of context; that is, meaning is conveyed by context. Wittgenstein's work, now famous, is discussed by Anthony Quinton and Bryan Magee in Magee's *Men of Ideas* (pp. 96-115), and by John Searle and Magee in the latter's *The Great Philosophers* (pp. 320-347).

If a statement does not constitute a tautology, then it must constitute error or approximation, and vice versa. Thus in any chain of "logical" reasoning, error will always be introduced. Otherwise we are saying the same exact thing, and thereby committing circularities or redundancies, also called truisms, being a circumstance where the subject is the predicate and vice versa.

This inadequacy is embedded in what is known as Gödel's incompleteness theorem, or proof or construction. In any system of logic diverse enough to be of interest, there will always occur inconsistences or contradictions. The gist of Gödel's work is reviewed in Morris Kline's *Mathematics: The Loss of Certainty* (1980). More fully, there is *Gödel's Theorem in Focus* (1988), contributed to and edited by Stuart G. Shanker, who also wrote *Wittgenstein and the Turning-Point in the Philosophy of Mathematics* (1987). That is, the very system of logic itself can never be demonstrated to be true, nor can the original propositions or statements. Thus all arguments become suspect. A set of logical propositions or elements of logic *must* be inconsistent or contradictory, otherwise they would only be tautological with one another, and merely state the same exact thing.

Perhaps the classic example of a tautology is "survival of the fittest." As has been pointed out by naturalist Joseph Wood Krutch and others—notably by Arthur Koestler in *Janus* (pp. 168-171, 173)—what we have is that the fittest are those which survive. Krutch further remarked in *The Great Chain* of *Life* (p. 183) that whatever happens is, by definition, called progress, and that modern animals are higher than more ancient ones since higher here means more recent. While Krutch was certainly well versed in the platitudes of evolutionism, in *The Voice of the Desert* (p. 87) he also philosophized that anyone who will believe in evolution will believe anything.

In effect, anything can be reasoned. That is, starting with an *a priori* assumption, the process of reasoning may take off in any direction. Moreover, the errors will be cumulative. Not to mention that the initial assumption cannot be reasoned or demonstrated to be true or correct, and can be regarded as arbitrary or man-made. The descriptor "capricious" is appropriate.

The distinction has long been known, starting with Plato, in the *Phaedo,* who speaks of absolute equalities. In I John 4:6, "Hereby know we the spirit of truth, and the spirit of error." St. Thomas Aquinas used the terms *intellectus* and *ratio,* the one to denote that which is intuitive or visionary and of the heart, the other referring to reason. Blaise Pascal wrote, in *Pensées,* no. 72, *Le coeur a ses reasons que la raison ne connâit point,* which can be translated as "The heart has its reasons which reason does not know." The world-famous mathematician Gottfried Wilhelm Leibnitz (or von Leibniz), who uncovered the calculus independently of Newton, spoke of "accurate knowledge" as distinguished from "adequate knowledge." There were the analytic and synthetic propositions or judgments of Immanuel Kant, the former being tautological, the latter in error. Oswald Spengler spoke of understanding *(Verstund)* and reason *(Vernunft),* the former tautological, the latter in error. Thus reason or synthesis, the ways by which we think, are inherently in error.

And if not either tautological or in error, if not one or the other, then precisely what is the resolution? Can a resolution even exist, that is, is it allowable? The answer lies in the landscape of language. For the one term is defined only in terms of the other. That is, a tautology is *not* "in error." Conversely, "in error" is that which is *not* tautological. There is no built-in compromise or antinomy. The two expressions, the two extremes, in still other words are mutually exclusive and, paradoxically, the explanation is in itself tautological. Strictly speaking, therefore, a tautology has also been committed in trying to explain what a tautology is or is not. Such it is with tautologies. Nothing more is known than before, absolutely; it is merely wrapped in different attire.

Assumably, these conclusions can be applied to the above statements, or any other statements, as well. Presumably, therefore, every person or idea of this world must be suspect and Truth, by default, must lie in the domain of the religious, theological, or metaphysical. In essence, Truth requires Authorizaton, or Sanctification, a thesis set forth by Julian Jaynes in his now-classic study *The Origin of Consciousness in the Breakdown of the Bicameral Mind* (pp. 317-338). That is, Truth is otherworldly or supernatural—or divine if you please—a necessity not at all surprising to some. For instance, in the Preface of *Visions and Memories of Paradise,* Richard Heinberg, for one, makes the leap that absolute truth, or Truth, is tautological with Myth. This may be distinguished from mythology, a word used to designate that which is man-invented.

It may be added that the particular divine source for Truth will depend upon the particular culture. What we call biblical Truth, however, is tautological with Compassion as embodied in the New Testament—a preemptive position. But these words and terms can be given no further meaning other than to say, simply, Truth is a Person.

If the above statements are challenged, then the challenge may in turn be challenged, *ad infinitum.* A

resolution may be provided of course by decree—which is in turn challengeable. It is why, ultimately, words and symbols must fail, and why, in Christianity, absolute truth or Truth is a Person. This is as far as the argument can be carried.

Logic and Illogic

As we so indicate, there are limitations to language and articulation. Thus MIT's Marvin Minsky recognizes that logical language can be used to describe illogical thought. Furthermore, our arguments and conclusions are formulated in logical terms *after* having been reached in other ways. "Logic no more explains how we think than grammar explains how we speak; both can tell us whether our sentences are properly formed, but they cannot tell us which sentence to make" (Minsky, pp. 186, 196).

There are in fact things we may wish to say which cannot be formulated in any language. For after all, what is a thought? In an exchange between linguist Noam Chomsky and Bryan Magee in Magee's book *Men of Ideas* (p. 213), this facet is emphasized, that there are impossibilities which will occur in every known language; some things simply cannot be said. Even so in the language of mathematics, as set forth by Davis and Hersh in *Descartes' Dream: The World According to Mathematics* undercuts the use of formal mathematical reasoning to solve humankind's problems.

The inversion of conclusion to argument is expressed most succinctly in *Alice's Adventures in Wonderland:* "Sentence first—verdict afterwards." Or, first the verdict, then the trial. For in any chain of reasoning, the conclusion is reached first, and the arguments are then provided. As Plato said in the *Meno,* if we do not know the solution to a problem then we do not know what we are looking for, but if we do know the solution then there is no problem. And as the great mathematician Karl Friedrich Gauss wrote, my solutions come first, the proofs can be filled in later (Koestler, 1964, p. 117).

Speaking of proofs, a proof or derivation is not a tautology and hence is intrinsically in error. A tautology, on the other hand, is not "proven"; it simply "is."

We may further distinguish tautologies from synonyms or definitions. Thus a synonym says *almost* the same thing, but not quite. Definitions talk around the subject, surround it, compare it against a background of other words and meanings, in so many words stating what the subject is not—embedded in the meaning of the term definition.

The renowned French mathematician/scientist Henri Poincaré wrote of the role of the subconscious and the flashes of insight which would occur at odd times *(e.g.,* in *Science and Method,* Chap. III). This has been expressed in other ways, for instance by the bisociations of Arthur Koestler, in *The Act of Creation,* where, figuratively, two independent or orthogonal (or perpendicular) planes of thought converge. Let it be said, however, that if these "Eureka's!" do not constitute tautologies, then they are in error.

The Infinite

The idea of infinity or the infinite is often proclaimed as a means of explaining the unexplainable. This gives rise to the monkey and the typewriter business, whereby with enough monkeys and typewriters and time, the Bible could be composed, or Shakespeare's works. And with enough time, therefore, evolutionism becomes an incontrovertible fact.

The game plan is that of explaining everything in terms of yet something else, backwards and forwards, *ad infinitum* and *ad nauseam.* The trouble is, nobody knows what infinity is, absolutely. The mathematician Georg Cantor started the trouble, by showing that infinities could exist within infinities. The circumstances are described by Eric Temple Bell (pp. 555-579). Rudy Rucker, in *Infinity and the Mind* (pp. 10-54), comments on this disparity in annotating the different kinds or levels of infinities. He addresses the problem of time, moreover, about this extrapolation back to the beginnings or origins, and the logical difficulties so incurred.

Now, enter the problems with numbers, real or imaginary. The real number system is composed firstly of the rational numbers, which are integers or the ratios of integers, and secondly, of all those other numbers which are not. The latter are variously called the irrational and transcendental numbers. They are allied with the idea of converging infinite series, but can never be shown to reach an absolute or exact value, and instead are compelled to wander, randomly and forever, throughout the interstices of the number system. The most famous, or infamous irrational number is π or "pi." Even if pi were exact—that is, rational—it would still be only another way to say the same identical thing, namely the ratio of the length of the circumference of a circle to the diameter.

We can but conclude that the ways of science and logic are inadequate to the task of demonstrating that evolutionism is an exact, absolute, and incontrovertible fact. For the workings of the mind are arbitrary and capricious, not absolute, and if there is one attempt at explaining the existence of life in the terms of evolutionism, or evolution mechanics, then there should be an infinity of other explanations, as speculated by Poincaré in *Science and Hypothesis* (p. 222).

The Denouement

The denouement is, and forever will be, that evolutionism is a creature of reason, whereby mankind attempts to explain himself and all other things—which is a logical impossibility. It is a chase in futility. Reason can only regurgitate tautologies, or else it is in error. Thus the mechanics of thought and articulation are inadequate to the task of absolute explanation. The limitations are built-in, inherent in the very logic or illogic which must be used.

The genesis or origins of all things is instead the proper domain of the Spiritual, has always been so, and so remains. The cyclic intrusions of intellectualism do not alter this central fact. The penultimate ascension of intellectualism was the Enlightenment, culminating in the Reign of Terror. Perhaps no one has had more scorn for the intellectual, the *philosophe,* than Oswald Spengler. Will Durant provides the appropriate quote in his *Great Men of Literature* (p. 97), as excerpted from Spengler (II, p. 16): "A whole world separates the purely living man . . . from the man who is destined either by the power of his mind or the defect in his blood to be an "intellectual" . . ."

It can be further remarked, in closing, that as far as academic instruction is concerned, the time would be better spent in examining the limits to logic and reason rather than in espousing the inferences of evolutionism.

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PANORAMA NOTES

Archaeopteryx Was A Bird

When evolutionists have their back to the wall trying to produce a transitional fossil, *Archaeopteryx* is the first to be presented. This can be observed at debates and in popular books, but behind the scenes there has been a battle raging between paleontologists and ornithologists. Most paleontologists believe *Archaeopteryx* was a feathered dinosaur that spent most of its life on the ground. According to John Ostrem its wings were used to trap insects. However, ornithologists believe *Archaeopteryx* is just an extinct bird, descended not from dinosaurs, but a common ancestor of dinosaurs and birds. In the mid 1980s it appeared the paleontologists had won the dispute (Morell, 1993).

Now the ornithologists, led by Alan Feduccia (1993), have made a strong comeback. Feduccia compared the curvature of the foot and wing claws of *Archaeopteryx* to the claws from 500 specimens of modern birds. He found a strong correlation between claw arc and preferred habitat. The birds with the least curved claws were ground dwellers, those with intermediate curvature were tree dwellers, and the birds with strongly curved claws climbed trees. The foot claws of *Archaeopteryx* fell within the range of the three strongest perching birds. The foot claws were also unlike dinosaurs, including the theropods, which *Archaeopteryx* was said by paleontologists to most resemble. The wing claws of *Archaeopteryx* were strongly curved and more difficult to interpret, since they were unlike the foot claws. The wing claws suggest that it used them to climb tree trunks. Feduccia concludes:

> Paleontologists have tried to turn *Archaeopteryx* into an earth-bound, feathered dinosaur. . . but it is not. It is a bird, a perching bird. And no amount of 'paleobabble' is going to change that (Morell, 1993).

He adds that its claws would have been a tremendous obstacle if it ran on the ground. Some paleontologists dispute the new evidence, but Ostrem accepts Feduccia's data as a strong argument that *Archaeopteryx* was a bird (Morell, 1993).

This new research adds to a slowly-gathered pool of data that indicates *Archaeopteryx* possessed advanced aerodynamic morphology (Feduccia, 1993, p. 792). For instance, its wing feathers conform to the asymmetric pattern of modern flying birds (Feduccia and Tordoff, 1979). As a bonus, Feduccia (1993) shows that the morphology of *Archaeopteryx* is similar to such modern birds as touracos, chachalacas, and the large cuckoos of the genus *Centropus.* In view of its bird feathers, wings, hollow bones, broad tail, aerodynamic design, bird morphology, and bird claws, Feduccia concludes: "*Archaeopteryx* was, in the modern sense, a bird."

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A Plant that Produces Wax as Protection from Arid Conditions

A previous study (Howe and Williams, 1990, pp. 86-91) presented the candelilla plant (Figure 1) from the perspectives of providence, design and typology.

Figure 1. A cluster of leafless candelilla stems that resemble little candles from which it derives its common name. Photograph by Glen Wolfrom.

Also the commercial importance of the wax extracted from the plant was explored. This plant, *Euphorbia antisyphilitica*, grows very well (actually thrives) in seemingly very barren areas of Big Bend National Park in Trans-Pecos Texas. Maxwell (1968, p. 96) noted:

> It commonly grows in the lowlands on limestone gravel slopes, in limestone ledge areas like the Sierra del Carmen and Mesa de Anguila and, to a lesser extent, on some igneous rock peaks and on lava flows.

Figure 2 shows prolific "patches" of the plant growing on a flat outcrop of limestone with essentially no soil content (Figure 3). This "tough" plant seems to "relish" such a harsh environment as it produces a wax that apparently protects it from the arid conditions. Interestingly the plant grows well in regions where there is a greater annual rainfall but it does not produce much wax. As Maxwell (1968, p. 97) stated:

Figure 2a. Clusters of the candelilla plant on barren ground with the Chisos Mountains in the background. Photograph by Glen Wolfrom.

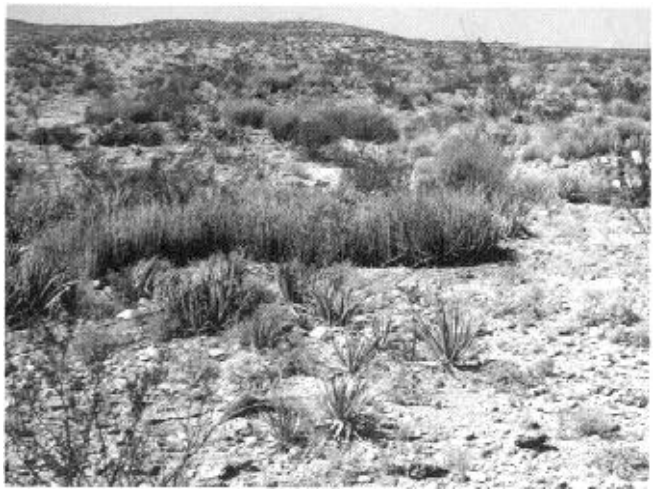

Figure 2b. "Patches" of the plant can be seen scattered over the limestone outcrop. Photograph by Emmett Williams.

> . . . in the Austin area of Central Texas, where the normal rainfall is about three times as great as that of West Texas, the plant grows rank but produces very little wax.

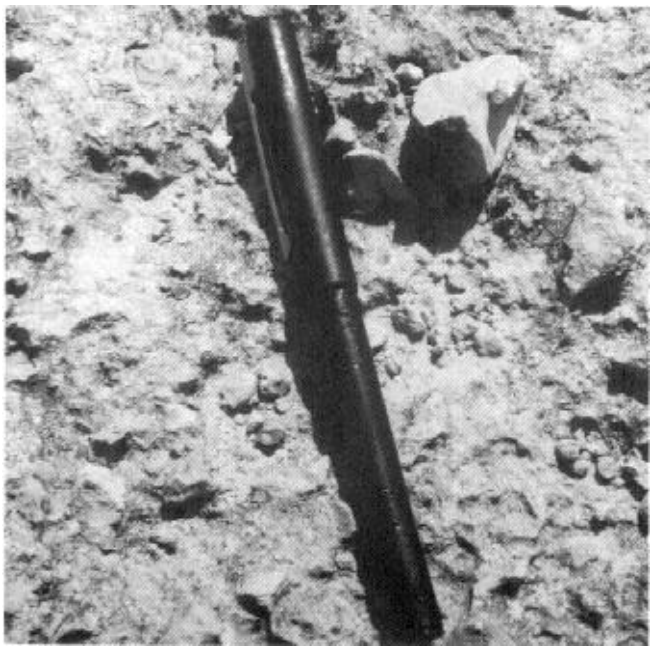

Figure 3. Typical "soil" where the candelilla thrives—an outcrop of limestone. Photograph by Glen Wolfrom.

It appears that the candelilla plant is *preadapted* to survive an arid climate on barren ground by producing a protective wax. When the plant does not need the wax, i.e., growing in regions with more rainfall, it does not produce much of the protectant.

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Water is More than a Drink

Water is a common chemical with very uncommon properties (DeYoung, 1985). Recent findings add further to the evidence of creative design in water. A survey article brings out the following three points (Pennisi, 1993):

1. Instead of being merely a solvent for proteins, water actually helps shape and bind protein structure. Water molecules also influence the function of proteins in unexpected ways. For example, water may act as a barrier to the binding of drugs by proteins. The role of water is of growing importance in organic chemistry.
2. Hot water partially dissociates into positive hydrogen and negative hydroxyl (OH-) ions. Hence the water simultaneously becomes acidic and basic, and hence very reactive. "At 300°C, water acts like the organic solvent acetone at room temperature . . . it can act as a solvent, it can act as a catalyst, and it can act as a reagent" (p. 124).
3. Heated ground water is a catalyst for the rapid formation of oil from organic matter. Water could wreak havoc on established ideas about oil formation. The results suggest that oil can mature faster than previously thought . . . [this may] require the revision of time parameters in computer programs now used to predict locations of new reserves (p. 125).

A popular article explains how design in nature is being studied and exploited for new products (Nash, 1993). Sea shells are stronger than advanced ceramics; the structure of rhinoceros horn is similar to the wings of Stealth aircraft! Spider silk is stronger than steel, stretchier than nylon, and tougher than Kevlar (bullet-proof vest material). And how are these cobwebs made?

> [The] incredible material starts out as a solution in water, and all the spider does is squirt it out through a small hole. In the process, proteins that were soluble turn into insoluble fibers. Now isn't that amazing? (p. 58).

See Williams (1988) for more information on spider webs.

We are just beginning to understand the importance of water to all parts of the Creation. The deeper we look into materials, the more clearly we see creation evidence.

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Modern Medicine Is Not So Modern

The earliest evidence we have of sound public health and sanitary practices is found in the first five books of the Bible, the Pentateuch (Burton, 1983, p. 7). In these writings the Israelites were instructed to isolate, and, if necessary, quarantine those who were sick. They were to destroy contaminated objects, to burn used dressings, and to bury fecal waste outside of the camp. The Israelites were prohibited from eating animals that had died of natural causes. They were also admonished to practice personal hygiene by hand washing and keeping clean, and to take certain precautions when touching the infected or deceased.

> When a man hath a running issue out of his flesh, because of his issue he is unclean. . . . Every bed, whereon he lieth . . . is unclean. . . . And whosoever toucheth his bed shall wash his clothes and bathe himself in water . . . And if he who hath the issue spit upon him that is clean, then he shall wash his clothes and bathe himself in water . . . And whomsoever he toucheth who hath the issue, and hath not rinsed his hands in water, he shall wash his clothes and bathe in water . . . (Lev. 15:2, 4-5, 8, 11).

These same regulations applied to a woman for a specific number of days following childbirth. Furthermore, it was clearly forbidden for Israelites to engage in any sexual relationships outside of marriage. Sexually transmitted diseases are avoided when the family unit consists of the biblical plan of two, husband and wife (see Genesis 1:27 and 2:23-24).

If Israelites obeyed the Word, they would enjoy great health. If they disobeyed, they would not.

> If thou wilt diligently hearken to the voice of the Lord thy God, . . . I will put none of these diseases upon thee (Ex. 15:26).

Unfortunately, during the Middle Ages the importance of the Bible was de-emphasized as the superstitious philosophies of Aristotle, Plato, and others became the chief authority. As a result of setting aside biblical practices of hygiene and infection control, medieval humanity was plunged into centuries of untold misery, suffering, and death from disease (Table I).

Finally, the Protestant Reformation in Europe loosened the grip of superstition and allowed a renewal of scientific investigation and exact description. As men returned to the authority of the Scriptures (which was the cornerstone of the Protestant movement), a great new era began: the era of modern science. Sir Francis Bacon, a devout Protestant philosopher, statesman, and formulator of the "scientific method" of research, summarized the beginning of this new era best when he declared:

> Let no man . . . think or maintain that a man can search too far or be too well studied in the book of God's Word, or in the book of God's works; divin-

Table I. Health and Sanitary Practices Listed in the Pentateuch.

Practice	Reference
Wound, Skin and Discharge Precautions	Lev. 15:2-11, 17:11
Postpartum Precautions	Lev. 12:2, 3
Interment Precautions	Num. 19:11, 14-16, 19, 22 Lev. 11:24-28, 40
Isolation and Quarantine	Lev. 13:1-14:57 Num. 5:2-4 Deut. 23:10
Waste Disposal	Deut. 23:12-14 Lev. 11:33, 13:47-48, 15:12
Unlawful Lifestyles	Ex. 20:14 Lev. 18:22, 20:10-16

> ity or philosophy; but rather let men endeavor an endless progress or proficience in both (Graham, 1986, p. 336).

It is generally accepted that modern **medical** science began in 1876 when Robert Koch and Louis Pasteur demonstrated (almost simultaneously and unknown to each other) the idea of contagion passing from one individual to another. The discoveries made by these men, however, were ignored and even scornfully rejected by virtually the entire medical establishment. Medical scientists and practicing physicians fiercely defended the age old Greek philosophy that microbial life could be generated "de novo" under certain conditions. Through careful experimentation, Koch and Pasteur were able to demonstrate irrefutably that not even the simplest of living things can arise spontaneously from non-living matter. More importantly, this discovery clearly proved that particular kinds of microbes were responsible for particular kinds of maladies. While presenting his ingenious "swan-neck flask" experiment, Pasteur spoke triumphantly (Dubos and Hirsch, 1965, p. 3):

> I have taken my drop of water from the immensity of creation, and I have taken it full of the elements appropriate to the development of microscopic organisms. And I wait, I watch, I question it!—begging it to recommence for me the beautiful spectacle of the first creation. But it is dumb, dumb since these experiments were begun several years ago; it is dumb because I have kept it sheltered from the only thing man does not know how to produce; from the germs which float in the air, from Life, for Life is a germ and a germ is Life. Never will the doctrine of spontaneous generation recover from the mortal blow of this simple experiment!

Louis Pasteur, a deeply religious man (Morris, 1982, p. 60), had demonstrated that life arose only from life. His experiments destroyed the evolutionary myth that the first life arose from non-living matter; a belief still held by evolutionists today. The refutation of spontaneous generation and the establishment of the germ concept of disease was undoubtedly the greatest contribution ever made to the saving of human lives. Had this not been done, physicians would still be devoting their efforts toward combating disease-producing organisms that were thought to have arisen spontaneously **from within** the patient's body. Today, physicians know that pathogens do not arise spontaneously, but are the lineal descendants of parent organisms that were originally transmitted **from outside** the body. Equipped with this evidence, Pasteur and others prevailed on surgeons and medical practitioners to adopt health and sanitary procedures that are strikingly similar to those that were recorded in the Pentateuch 4,000 years earlier! The results were spectacular; millions of lives were and are saved.

It is clear that the true facts of modern medicine agree marvelously with the Bible. For example, the Mosaic regulations pertaining to childbirth, sexual relationships, hand washing, wound and discharge care, quarantining, interment precautions, and waste disposal are examples which seem to indicate that diseases are communicable, and that the best protection against them is to prevent their spread. Furthermore, the germ concept of disease harmonizes perfectly with Genesis 1:24-25 in that God has commanded all living things (which would include microbes) to reproduce "after their kind." Preventive medicine becomes possible with this truth alone! Although the Bible is not a science text, whenever it speaks of scientific matters, it speaks truly and accurately. The most logical explanation of this phenomenon is that the Bible is what it claims to be: **the inspired Word of God.**

What is certain, in any case, is that no constructive progress in medicine was possible until the ancient evolutionary doctrine of spontaneous generation was discarded. The fierce battles to destroy this superstitious myth regarding the origins of microscopic life is one of the most exciting sagas in the long development of modern medicine. For today's scientists, however, to hold to similar evolutionary philosophies regarding the origins of human life is a retreat to the stagnation and superstition of the Dark Ages.

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QUOTE

This modernity seemed to me to be a great civilizational decision to repeat the original sin in the Garden. The serpent had said: "You shall be like God." Was this not the point of the modern project, that man the creature would become his own creator, that nothing would exist that is to him in a relationship of giveness which can only be accepted? *Homo sapiens,* the man who is *wise* because he can come to understand his place in the created order willed to become *homo faber,* man the *maker,* who knows himself only in his technological mastery over his world.

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Advanced Placement Coordinator Questions Evolution

Last spring, when Advanced Placement Examinations had almost concluded, I received from the College Entrance Examination Board (CEEB) various *Advanced Placement Course Descriptions,* including one for biology. Eight percent of the Biology Exam is on evolution, and "Evidence for evolution" is one of the six rubrics under the biology heading.

Being an evolutionary skeptic, I looked through Neil A. Campbell's textbook, *Biology* (1990), and also consulted *Life: The Science of Biology* by Purves, Orians and Heller (1992). Both are listed by CEEB as acceptable.

Campbell's book purports to be scientific but steps over scientific boundaries into metaphysics. It labels as "myth" the notion "that organic molecules are products of supernatural vital forces" (p. 17) and affirms the notion "that life developed on Earth from nonliving materials" (p. 513). It further states, "The history of life is not a story of immutable species individually created on a conservative planet . . ." (p. 9). These statements, however, cannot be supported by science. No human scientist was present in the beginning, and no modern scientist can replicate anything that comes near to the creation of life from inorganic materials. Even if he or she could, it would point in the direction of intelligence being required rather than randomness.

Campbell's textbook is inconsistent; it lists as one of the properties of life the "axiom known as biogenesis," that "Life comes only from life" (p. 4). If life comes only from life, how can the author say that "life developed . . . from nonliving materials" and imply that "supernatural vital forces" should be excluded?

The Purves, Orians and Heller textbook is more guarded: "The initial energy source for life's evolution is not known, but volcanic vents were probably important sites for the evolution of protolife" (p. 397).

I am appalled that one of the greatest biologists of all time, Louis Pasteur, is excluded from the 24 page index of Campbell's text. Pasteur established the Law of Biogenesis and perhaps should be regarded as the father of modern bacteriology as well as being a major contributor to the developments of vaccination and immunization. He contributed more to world health than perhaps any other modern scientist.

Since Campbell's textbook worships the notion of evolution—"the one biological theme that unifies all others: evolution" (p. 117)—one wonders if Pasteur was excluded from the index because he demolished the then-prevalent and naive evolutionary notion of spontaneous generation. The Purves et al. textbook describes him as "the great French scientist" and credits him with obtaining "results that finally convinced most people that spontaneous generation does not occur" (p. 386). Authors Purves, Orians and Heller are apparently not among the "most," however, because their text goes on to assert that "life *did* arise by . . . a form of spontaneous generation—under conditions much different from today's" (p. 397).

The evidences for evolution given in Campbell's textbook (pp. 434-437) are extremely weak. They include conjectures about biological distributions, misleading information about fossils, arguments from taxonomy, comparative anatomy, embryology, and molecular biology.

Regarding fossils, the text says that the "record of past life is incomplete even today, although . . . many of the key links are no longer missing" (p. 435). The only example in context, however, is *Archeopteryx,* and we have known about this extinct animal for many decades; moreover, fossils of birds predating *Archeopteryx* have recently been uncovered, disqualifying *Archeopteryx* as a "key" link.

Niles Eldredge, interviewed in the text, refers to "the fundamental observation that there are few good examples of slow, steady, gradual transformations within species in the fossil record through time" (p. 421) and adds that "a hundred years (after Darwin) there still weren't many satisfying examples of gradual transformations." How does this harmonize with the statement, "many of the key links are no longer missing" (p. 435)? Time and space do not permit delineating other weaknesses.

In conclusion, metaphysical evolution presuppositionally rules God out of the picture, and the manifold wisdom and design we see throughout creation is offered as the product of blind chance. The notion that a computer could have come into existence without intelligence is absurd—how much more the human brain!

Evolution should not be taught to students unchallenged, at least in science. Arguments against its validity should be encouraged and alternative approaches considered. Moreover, this approach should not be viewed as being inimical to science. Isaac Newton, perhaps the greatest of all modern scientists (gravitation, laws of motion, calculus) had no problem with the concept of God. In his *Principia,* he wrote of the "Lord over all."

Many other scientists, including Robert Boyle (regarded as the father of modern chemistry and an apologist for theism), George Cuvier (credited with being the founder of the science of comparative anatomy), Michael E. DeBakey (famed heart surgeon who said, "I still have almost religious sense when I work on the heart. It is something God makes."), John Ambrose Fleming (considered the father of modern electronics and first president of the Evolution Protest Movement), Johann Kepler (viewed as the founder of physical astronomy, the one who thought "God's thoughts after Him"), Carolus Linneaus (judged to be the father of biological taxonomy, relating "species" and "kinds"), Joseph Maxwell (also one of the greatest of modern scientists and strong opponent of evolution), Gregor Mendel (the father of genetics and one who rejected Darwin's evolutionary notions), Samuel F. B. Morse (telegraphed, "What hath God wrought!"), John Ray (referred to as the father of English natural history and author of *The Wisdom of God Manifested in the Works of the Creation),* and many others likely would have concurred.

To the question, "What other forces do you see leading us to the humane holocaust?", Malcolm Muggeridge responded in 1986:

> I think that after the story's told, when the history of our time is written, we will see that the theory of evolution—which has invaded every single discipline within the whole structure of Western thought which is itself based upon this theory—

was one of the most brilliant coups of the devils. Of course it's complete nonsense, but it has captivated the Western mind. The belief that this theory is absolutely true is so borne in upon the educated that you can't reach them. I find it incredible. (See Brooke and Muggeridge, p. 37.)

Several years ago, I received in my school mailbox a personal letter from the then Surgeon General C. Everett Koop, M.D. He wrote, "It has been my conviction for many years that evolution is impossible, just on the basis of mathematics alone." I agree. As far as I am concerned, students would make better use of their time if they were required also to know the evidence *against* evolution. The biological establishment, I believe, opposes this, but considering opposing evidence is good science.

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An Interesting View of Extinction (Quote)

Whatever the nature of the altithermal, wet or dry, drought cannot be advanced as an explanation for the extinction of large mammals 8,000 to 10,000 years ago. The circular argument that drought caused extinction and that the presence of extinct animal bones is proof of wet climates can be discarded on empirical grounds. Extinct animal bones are to be found in sediments representing either pluvial (wet) or postpluvial (dry) environments.

Some anthropologists and paleontologists may dispute my insistence that large mammals disappeared not because they lost their food supply but because they became one. At first the suggestion that the *earliest invaders of the New World were culturally so advanced and technically so skillful* that they managed to destroy more native species of animals than have fallen victim to the onslaught of western civilization seems preposterous. It violates our notion of cultural progress and our tendency to view Paleo-Indians as a part of the balance of nature. Perhaps we have underestimated the population size and technical ability of the early hunters. Admittedly, our knowledge of Early Man is not terribly revealing . . . From the continent-wide distribution of the diagnostic projectile points Mason . . . has inferred a cultural homogeneity and a common base of subsistence based on fulltime hunting of large mammals. In the absence of any convincing alternative explanation the indictment of Early Man is unavoidable.

Following extinction of the large mammals the early hunters probably suffered economic depression and a population crash. Under a climate similar to the present and with the existing biotic zones in place, the early hunters were obliged to begin their 7,000-year experiment with native plants, leading in the altithermal to increasingly skillful techniques of harvesting and gathering, to the domestication of certain weedy camp-followers, and, within the last 1,000 years, to the widespread adoption of flood plain agriculture. Many clues along the trail remain to be detected by pollen analysis and other paleoecological methods. [Emphasis added.]

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Reprinted CRSQ Volume 12

Introduction

The *Creation Research Society Quarterly* has been published since 1964 (29 complete volumes). In an effort to make these volumes available, many of the missing issues have been reprinted. Brief synopses have been written on volumes 1-11 and have appeared in the previous 11 quarterlies. In each synopsis, major articles are reviewed to give a person interested in scientific creationism a general idea of the contents of that volume. Many of the articles are of continuing interest and value.

Young Earth and Solar System

The theme of many of the articles in the June 1975 Quarterly was the young earth and solar system. Walter Lammerts, in an unique study (1975, pp. 3-6) on Yosemite Valley, used botanical and geological evidence to claim that the Valley is youthful in age. Employing radiation pressure on micrometeoroids and the existence of micrometeoroids, Samec (1975, pp. 7-10) concluded that the solar system must be young. Barnes (1975, pp. 11-13) determined the energy of the earth's magnetic field and showed by the yearly loss of energy from this field that it must have originated recently. Henry Morris (1975, pp. 19-22), using 74 "dating" methods and uniformitarian assumptions, showed that the age of the earth could be found to be from "too small to calculate" to 260 million years in age. About 33% of the methods yielded "ages" of less than 10,000 years. Obviously there is no such thing as a scientific dating method. This interesting article deserves serious study. Meteoritic evidence for a young earth was presented by Steveson (1975, pp. 23-25). Then Ingram (1975, pp. 32-33) considered that a young universe is a theological necessity.

Mathematics

In a series of articles, David Rodabaugh (1975a, pp. 14-18; 1975b, p. 107; 1975c, pp. 173-175) using statistics and probability arguments, demonstrated that the improbability of the occurrence of molecules-to-man evolution is so great that it can be considered scientifically impossible. He noted that to extrapolate present observational data into the remote past (4 billion years ago) is unfeasible because of the error involved. Considering population statistics and examining human population growth figures it was shown that predictions based on the creation model are reasonable but the evolution model leads to absurd conclusions. Applying probability arguments to the fossil record and the gaps involved, one realizes that for all practical purposes, molecules-to-man evolution is impossible.

Physical Sciences

Giannone (1975, p. 53) briefly compared the ark with modern ships and stated that ". . . the Master

Architect knew precisely what He was doing when He gave explicit instructions to Noah, the world's first shipbuilder." Harold Armstrong (1975b, pp. 103-106) formulated arguments with the macroscopic form of the second law of thermodynamics to show that supposed evolutionary development definitely could not have been a spontaneous (natural) process. The first and second laws of thermodynamics were discussed in a unique manner by Hubert (1976, pp. 192-193) in his presentation on creation, creativity and degeneration. Larry Helmick (1975, pp. 156-164) discussed optical activity of living organisms within a teleological model. He claimed that:

> Optical activity is a fundamental physical property of all living organisms. Therefore, anything used to account for the origin of life on earth must account for this amazing phenomenon. The mechanistic theory, involving chance and natural selection, is inadequate to explain the origin and maintenance of optical activity which is presently observed in the biosphere. However, a teleological theory based upon a recent, highly ordered divine creation, followed by degeneration, will account for this phenomenon. Moreover, such a theory is in agreement with the Genesis account of creation, the laws of thermodynamics, modern chemical theory, and chemical, biological, and geological data (p. 156).

A theory of gravitation was developed by Barnes and Upham (1976, pp. 194-197) with the same type of equations as employed in electrical field theory. The so-called three Einstein effects were deduced by the authors without reference to the general theory of relativity and the 10 field potentials required in that theory. In a very detailed article, Courville (1976, pp. 201-210) explained the uses and abuses of astronomy when dealing with Egyptian chronology. He concluded:

> . . . claims of error in Scripture can be met head-on; and it is found that the error is not in Scripture, but rather in the conventional interpretation of archaeology and chronology (p. 209).

Earth Sciences

Erich von Fange (1975, pp. 131-138) in a treatise entitled "Strange Fire on Earth" outlined several instances in earth history of violent conflagrations and the damage wrought by such events. Burdick (1975, pp. 155-156) briefly discussed thrust faults near Loch Assynt, Scotland and compared them with the Glarus formation in Switzerland. In the first of a series of research reports (Williams, et al., 1976, pp. 211-212), the data concerning rapid precipitation of dripstone-like formations in a laboratory situation were given. In these experiments, it was hoped to find the conditions under which rapid formation of $CaCO_3$ structures could be achieved and to compare them to actual cave situations.

Personalities

"Darwin's Last Hours" written by Rusch (1975, pp. 99-102) examined the claims of the so-called death bed conversion of Charles Darwin. This article is a chapter in the book *Did Charles Darwin Become a Christian?* which is devoted to an investigation of Darwin's views on Christianity. Davidheiser (1975b, pp. 164-166), in discussing the Charles Lyell centennial, pointed out the deceptive nature of some of Lyell's claims.

Biology

Botany

George Howe (1975, pp. 47-51) thought that conducting vessels in plants presented problems for both evolutionists and creationists but he suggested that the creation model best fitted the available data. Tinkle (1975, p. 52) continued his research on the reduced viability of mutant plants. Differentiation in the vascular cambrium into xylem and phloem was presented as evidence for teleology in botany by Thompson (1975, pp. 59-61). An interesting thesis developed by Ferguson (1975, pp. 108, 127) noted that plant dormancy is evidence of skillful design. A well-done field study by Howe (1976, pp. 184-190) on how two different chaparral shrubs grow after fires will be of interest to botanists. Such patterns of regrowth were considered evidence of the providence of God. Lammerts (1976, pp. 190-191) briefly outlined speciation in two shrubs. He noted that the evolutionary model did not satisfactorily explain his observations. Cornell (1975, pp. 139-140) showed how the moccasin flower *(Cypripedium acaule)* had to be designed.

Zoology

Smith (1975, pp. 54-58) discussed body temperature regulation in reptiles, birds, and mammals. Such factors as heat production, blood flow, evaporative water loss, behavioral and physiological mechanisms were examined. The author concluded that God designed animals so that they could live in their respective niches. Cow and horse brains were compared (Davidheiser, 1975a, pp. 88-89) and it was explained how the evolutionary hypothesis fails to account for the physical realities. The remarkable skull of a woodpecker was shown on the cover of the March 1976 Quarterly and Sunderland (1976, p. 183) related how the tongue of this bird had to be designed and could not have evolved.

Genetics

Quinn (1975, pp. 62-65) discussed the conversion of codons into analogous conformers and the assembly of conformers into polypetides. Then he illustrated how models could be constructed to aid students. Homoeotic mutants in light of evolutionary claims were examined by Ouweneel (1975, pp. 141-154). He explained the importance of homoeotic mutants to creationists and presented various interpretations of the experimental findings. This detailed treatise is well worth reading.

General

Armstrong (1975a, p. 31) gave an unusual interpretation of natural selection. Gish (1975, pp. 34-46) reviewed creationist research of the past decade. This article is a chapter in the book, *Creationist Research (1964-1988)* written by him. Wolfrom (1975, pp. 84-88) developed a thesis that evolution is a poor scientific theory and must be believed religiously. The canopy theory of the early earth was examined from a Scriptural standpoint by Udd (1975, pp. 90-93). Tinkle (1975, pp. 94-95) explained some errors in scientific methodology as related to the evolutionary concept of gradual development. Holroyd (1975, pp. 95-98) carefully noted that

chance events cannot produce symmetry and design. Writing in a novel format, Bass (1976, pp. 197-200) revealed the superstition of stochastic succession. This volume of the Quarterly also contains technical notes, book reviews and letters to the editor on many subjects that deal with the creation/evolution controversy. A wide range of creationist scientific work can be found within its pages.

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MINUTES OF 1992 CREATION RESEARCH SOCIETY BOARD OF DIRECTORS MEETING

On Thursday, 9 April 1992, a meeting of the Executive Committee was held from 2020 to 2250 hours to set the agendas for the committee meetings on Friday. On Friday, 10 April 1992, between the hours of 0800 and 1700, the Constitution/Bylaws, Financial, Publications, Quarterly Editorial, Research and Temporary Fund Raising Committees held meetings each of approximately two hours. The Chairman of each committee recorded the business in preparation for the Saturday business meeting.

The official annual meeting of the Society was opened at 1900 hours by President Frair. Present were E. Chaffin, D. DeYoung, W. Frair, D. Gish, G. Howe, D. Kaufmann, L. Lester, J. Meyer, W. Rusch, E. Williams, G. Wolfrom, P. Zimmerman and 220 visitors. The President welcomed everyone to this meeting of the 29th year of the Creation Research Society. This was followed by silent prayer. Dr. Ted Aufdemberge, Professor of Science, Concordia College, welcomed CRS members and guests to the College. President Frair expressed gratitude from the CRS to the Creation Science Association of Detroit for providing refreshments.

Meyer gave a report on the latest developments of the CRS Grand Canyon Center near Chino Valley, Arizona. Wolfrom gave a report on CRS work at the Grand Canyon. Howe gave a report on a study of the Haymond Formation. Williams gave a report on the status of CRS publications. Howe introduced the speakers of the Mini-Symposium: New Developments in Creation Science. DeYoung spoke on "New Developments in Astronomy" Frair spoke on "Baraminology in Action." Gentet spoke on "Early California Gold Diggers." Humphreys spoke on "Young Earth Cosmology." Lester spoke on "Life—The Changing Creation." Rusch spoke on "The Law and Origins." Gish spoke on "How the Universe Began—An Update." The meeting was ad-journed at 2145 hours for refreshments and social discourse.

On Saturday, 11 April 1992, the closed business sessions of the Board were called to order at 0800 hours. Present: D. Boylan, E. Chaffin, D. DeYoung, W. Frair, R. Gentet, D. Gish, G. Howe, R. Humphreys, D. Kaufmann, L. Lester, J. Meyer, W. Rusch, E. Williams, G. Wolfrom, P. Zimmerman. The minutes of the 1991 meeting were read and accepted. Secretary Kaufmann