

modern DNA-DNA and DNA-RNA hybridization research. Often results of this research are interpreted to fit a broad evolutionary pattern, but our observations indicate that more restraint and caution should be exercised in evaluating results of these types of studies.

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PHILOSOPHICAL ESSAY

HISTORICAL VARIATION IN THE HUMAN CREATURE

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Abstract

The human body has varied little in basic structure but our historical artifacts have changed dramatically. Intelligence, seeking to conquer "chance" by force, speed, efficiency and control, is largely responsible. Evolutionary science does not care about quality but rather quantity under mathematical control. Rejecting supernatural intelligence by fiat in the very definition of the scientific method, leaves reason without a true foundation for the existence of anything. More important, the final source of all variation is ignored. This source is God's love of the beauty and complexity of the design he himself created. As we are made in His image, we should likewise enjoy His work of beauty and complexity. Evolution has stolen this from the life of millions.

Introduction

The world is full of millions of things: plants that fix sunlight energy for food, the ceaseless ocean tides, high mountain timber, tiny amoebas, massive rhinoceros and delicate humming birds. Heavenly bodies and earthly creatures, often of startling and strange array, are everywhere. We are not their source, nor did we create ourselves, yet we can use our bodies in incredibly varied ways, generating strikingly diverse cultures. This variety is based in intelligence, not random processes or mutations. Each person and each culture has a unique bounding line. These bounding lines define the field of action and the dwelling place of each human. This boundary line is both physical and spiritual—our dearest friends in another state are spiritually "closer" than a passerby a few feet away.

The Evolutionary Model and Human Variation

According to evolution, all variation in nature and man have chance, natural law, and time as their source. By chance and chaos, all life evolved from an original explosion of dead matter. Evolution maintains that there is no unique bounding line for each creature and culture. Transitional forms must abound. Our intelligence, grounded in chance, cannot rise above its chance "cause." Thus any thought is as "good" as an-

other. Even Darwin's thoughts are true only as by majority vote, not objective knowledge based in absolute truth.

In the evolutionary model, men are a mass of self conscious beings, reaching more and more closely to the goal of perfection as proposed by the leading evolutionary scientists. Evolutionary men hope to develop an autonomous utopia of their own design, subject to no god. Man can do anything. He is on his way to control of the universe, the final frontier. Soon every being on the earth or in the skies will be numbered and graphed and tracked with the exception of God, who has been declared dead and need not be counted!

Force, speed, efficiency, and control are the values of the coming world government utopia, with mathematics as the operational language. Quality, beauty, truth, justice and love are no longer factors. Quantity is the sole guide. Variation among all things is to be crushed. The devices and gadgets do man's work. Man controls all their actions through his intelligence. There is a downgrading of quality for the sake of monotonous, efficient repetitious action as in fast-food chains and educational mills.

Nature is the "raw" material for man's gigantic re-fabrication schemes to turn her into designs of every human wish. Nature has no independent meaning and is self-generated by chance. Chance provides the many

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favorable mutations needed for evolution's meaningless, directionless pathway without rhyme or reason. Such a production has not occurred, however, the great majority of mutations being detrimental to the creature or plant. Nature is worshiped as an illustration and catalog of what chance, natural law and time produced in the millions of years before man's appearance. To the evolutionist chance is amazingly "creative." Much more creative items are to come as man's total guidance improves chance's illogical ways by his curious rationality. Man will do much better as the endlessly evolving millennia roll along. Endless, that is, until the sun burns out and the impermanence and meaninglessness of everything is made clear.

Only the evolving tip of the future is ever important to the evolutionist. The past is always a simple preparation for the better as the future unwinds toward utopia and then the final nothingness. Those who helped prepare the way will cheer the final, perfected human, before the great freezing darkness comes.

According to the evolving model, tremendous change based on natural selection has moved the self-existent life force from dead matter via evolution to amino acids, replicating DNA, proteins, mice and men—all via chance variations and the familiar marvels brought by natural law and time. A key question arises at this point. Whence came the pattern of variations upon which natural selection is to work and why do they follow a closely related pathway until, say, an eye is formed?

At that moment when the RNA/DNA system became understood the debate between evolutionist and creationist should have come to a screeching halt (Taylor, 1989, p. 24).

The mark of extreme intelligence, not chance, is behind the scientific evidence that variety is always bounded, with no transitions from one variety of tool or gadget or creature to another. Nor has any transition from reptile to hummingbird or hawk ever occurred.

This is true because the problem of origin of life is not unique—it only represents the most dramatic example of the universal principle that complex systems cannot be approached gradually through functional intermediates because of the necessity of perfect co-adaptation of their components as a pre-condition of function (Denton, 1985, p. 270).

Little variation of the human body has occurred since the time of Noah. However, massive changes in the gadgets, buildings, transportation machines and political and social structures have appeared during the history of man, especially in the last 200 years of western history. Obviously, there has been tremendous variation and change in production tools and items produced by the use of the tools such as oscilloscopes and CAT scans. However, despite this "evolution" all men, with whatever gadgets are provided, are still subject to death. Finally, the fittest do not survive. The question of the final meaning of life continues to face each man. Society cannot face it for us. Death is absolutely individual. Why all the variations if they simply cause a bit longer term of life before death? The question is not really answered by the evolutionist, save with some entropic nonsense about cryogenics.

The likelihood of the formation of life from inanimate matter is one to a number with 40,000 noughts after it . . . It is big enough to bury Darwin and the whole theory of evolution . . . if the beginnings of life were not random, they must therefore have been the product of purposeful intelligence (Taylor, 1989, p. 61).

The Creator/Creation Model

The creation model understands the simple reason for the vast variety in creation. The Creator loves it! Creation and man are never meaningless to God. Again, God and believers delight in the variations in the universe and especially those on earth. That is why, for example, He programs variety in the structure of DNA. DNA is designed to produce beautiful variations on a theme in each created kind.

It is important to note that the information transmitted by DNA is not written on or within the molecules themselves. It is transmitted by the intelligently-organized pattern of their arrangement. Molecules have no intelligence. And, like a computer disk, DNA has no intelligence. The complex purposeful codes of this "master program" could only have originated outside itself . . . Intelligence must have come first, before the existence of DNA (Taylor, 1989, p. 24).

Historical Varieties in Human Artifacts

Human bodily variation is tiny compared with the "things" issuing from the mind of man, especially in recent history. What is the meaning of this wave of invention? The fear of death is behind the host of things and devices. They are to smooth life out and slow down its decay. So far it has seen little success. More people are living longer, but the length of each life is still threescore and ten as Psalm 90:10 declares. The outburst of "things" to preserve us is closely tied to the virtual extinction of faith in life after death on the part of modern secular man. This life is all there is: "you only go round once." Darwinism elevated chance to the mighty role of God and turned the intellectuals back from the God of compassion and mercy and resurrection life. Now our own gadgets must and will save us, they boast. This drive for utopia in an entropic universe has caused the reality alluded to by T. S. Eliot in the *Four Quartets*:

The whole earth is our hospital
Endowed by the ruined millionaire,
Wherein, if we do well, we shall
Die of the absolute paternal care
That will not leave us, but prevents us
everywhere (Eliot, 1971, p. 128).

A glance into the jungle of care gone wild is the scene in the modern hospital, where dying becomes a mechanized "wonderland" of man's devices and the souls of the dying are of little or no concern.

The historical variations in human consciousness and behavior result from the adoption of differing theories of knowledge and first principles. Buddhism and Christianity, for example, have totally differing epistemology and metaphysics. The truth of these varying foundations is decided by the individual. Any historical understand-

ing may be entered into at any historical moment. The popularity of differing theories of knowledge, epistemology and first principles, changes throughout history.

In order to build deep, textured layers of space/time history, with many historical variations, the living soul needs, paradoxically, limits to change. We do not delight in swift and continuous variation. It is threatening to move at high speed, knowing that a real or symbolic crash could destroy us. Yet we live in an age continually subjecting us to just this possibility and praising it to the hilt, however much it disturbs. On the other hand, slow movement such as that of a person in confinement is boring and considered a punishment. The prisoner is not free to enjoy the many different sights and sounds of life outside. He is confined in a cell with no window or perhaps a tiny one. The lack of variety is maddening.

However, our pattern does not cycle endlessly. We are moving in a direction. Basically we have two

major directional possibilities, both of which follow an arrow of purpose. We may seek to control and transform the fire of growing, blooming, and decaying nature, ever refabricating greater wonders of our making, hoping to control it all at last, but finally with no hope. Our final hope will be to join Issac Asimov in meaningless nothingness after death (Meyers, 1989, p. 272).

The other arrow of purpose seeks first the Creator. He provides our needs within our temporary creaturehood as He also does with the future.

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BOOK REVIEWS

Genesis and the Dinosaur by Erich A. von Fange. 1990. Living Word Services, 72876 CR 29, Syracuse, IN 46567. 311 pages. Paperback, \$15.95.

Reviewed by Don B. DeYoung*

The author is Emeritus Professor of Psychology and Statistics at Concordia College, Ann Arbor, MI. He has lectured widely on dinosaurs, and has studied their bones both at excavations and in national museums.

One purpose of this very readable book is to "hang out for a much needed airing known humbugs and frauds about dinosaurs" (p. 15). Dr. von Fange also discusses the age of the earth, theories of dinosaur extinction, and ancient petroglyphs of dinosaur-like animals. The actual text covers 160 pages; an additional 151 pages cover appendices and two reprints of CRSQ articles by von Fange. *Genesis and the Dinosaur* contains no subject, name, or scripture index, a near-fatal omission for a book which otherwise is a useful reference. The book is self-published and illustrated with black and white photos and drawings. I caught seven printing errors at first reading, but even a major publisher is no guarantee of perfection! Many of the 250 references are secondary rather than primary.

Dr. von Fange places the dinosaur age between the Fall and the Flood. He sees these creatures as misfits and monsters, perhaps macromutations caused by intense radiation following the curse (p. 30). He proposes a rapid, degenerative change from simple, graceful animal shapes with "clean limbs" to the "strange" triple horns, great ruffs, and sail-like spinal fins of dinosaurs (p. 31). Perhaps because of this bias, the author does not dwell on the incredible design of these magnificent creatures. Many readers will prefer to accept dinosaurs as a part of the original, perfect creation. It is ironic that evolutionists discuss in detail such design aspects as the air-conditioning ability of stegosaurus fins (Farlow, 1976), while this creationist book never mentions the idea.

Dr. von Fange sees the Fall-Flood world as an extended, grim time of violence on the earth. The earth

itself experienced "plastic," tortured upheavals with many mass extinctions (p. 114). In fact, the author suggests the dinosaurs may have already been extinct by the time of the Genesis Flood. This view, although not held by most creationists, is certainly worthy of consideration.

Erich von Fange believes that portions of Genesis were "doubtlessly" originally written by Adam and Noah (p. 22). This questionable, dogmatic statement is balanced elsewhere by a refreshing openness: "We cannot say [concerning a particular creation view] how it was, but . . . how it could have happened" (p. 78). In spite of the book title I was disappointed at the lack of detailed analysis of Job 40-41, as well as the lack of a thorough analysis of other Scripture references to behemoth and leviathan.

The reader will not have every dinosaur question answered in this book. For example, the recent footprint controversy in Paluxy, Texas is not explained. However these shortcomings are met by strengths such as an excellent summary of dinosaur finds including actual (nonmineralized) bones, mummified skin, and stomach contents (p. 108). I also learned two new secular extinction theories: the dinosaurs failed to evolve feathers and caught pneumonia; all the dinosaur eggs hatched as boys so the family tree died out (pp. 111-13)! This book is recommended for anyone who strives to reconcile *Genesis and the Dinosaur*.

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- Farlow, J. O., C. V. Thompson, and D. E. Rosner. 1976. Plates of the dinosaur *Stegosaurus*; Forced convection heat loss fins? *Science* 192:1123-25.

An Ice Age Caused by the Genesis Flood by Michael Oard. 1990. Institute for Creation Research. El Cajon, CA. 243 pages. \$19.95.

Reviewed by Larry Vardiman*

The idea that ice sheets have repeatedly covered the tops of mountains and continental plains at north-

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ern latitudes over the past several million years has so captured the imagination of scientists and laymen alike that little effort has been expended in reconciling it with the Biblical account of earth history. Even students of the Bible seem to falter when discussing how an ice age fits with Adam, Noah, and Abraham. The common solution seems to be the allowance of an ice age in the distant past, accommodated with the Bible in a similar manner as the formation of strata, mountains, and fossils in a period prior to Adam or in a gap somewhere in Genesis.

Michael Oard has done a tremendous service to the Creationist community and Biblical Christians, in general, by addressing this issue squarely and presenting the case for a single, recent ice age following a literal world-wide Flood in Noah's time. Mr. Oard follows in the tradition of another meteorologist turned ice-age enthusiast of another time—Alfred Wegener. It is not enough to consider the geology of the ice age; one must also consider the atmospheric conditions which spawn an ice age. Mr. Oard is well qualified to address the atmospheric issues. He received his B.S. and M.S. at the University of Washington, one of the world's leading schools in atmospheric science. He has worked as a forecaster for more than 15 years with the National Weather Service and has written numerous articles on forecasting and ice age theories. In addition to his expertise in meteorology he has become an expert in those areas of geology, paleontology, and climatology which relate to a study of an ice age.

Mr. Oard first reviews the requirements for an ice age, the multitude of theories which have been proposed, and the inadequacy of uniformitarian ice age explanations. He concludes that,

In summary, the proposed solutions cannot provide the sustained cooling and heavy snow to glaciare northeastern North America under essentially uniformitarian conditions. Modern research shows that much more summer cooling than previously thought is required. Even doubling the normal snowfall is not sufficient (p. 12).

He goes on to say,

On one hand, extensive glacial deposits cover the surface of mid and high latitude continents, providing undeniable evidence for extensive past glaciation. On the other hand, atmospheric science and related disciplines strongly suggest that an ice age, which depends upon present processes, (uniformitarianism) is nearly impossible. The only other possible solution is with a catastrophic mechanism. Such a mechanism is, by definition, dramatic, and out of the range of normal experience, but many scientists are now convinced that a catastrophic mechanism has much scientific support (p. 20).

Michael Oard then garners the support for a catastrophic ice age. He discusses the conditions on the earth following the Flood of Noah such as the presence of volcanic dust, greater cloudiness, higher albedo, and more stable storm tracks along continental margins. All of these conditions would have contributed significantly to greater snow and ice accumulation in locations consistent with evidence for massive ice sheets. He then defends a single, recent event by critiquing

the evidence for old, multiple ice ages. One very interesting subject treated by Mr. Oard is the disappearance of the mammoths by the growth of ice sheets toward the slowly cooling Arctic Ocean. He believes they were trapped by the encroaching ice sheets. (p. 86).

Mr. Oard supports some of his more quantitative arguments with model calculations discussed in appendices. He calculates the growth and melting rates of ice sheets and shows they could easily form and disappear within one thousand years. He also estimates the maximum ice depth.

The Monograph, *An Ice Age Caused by the Genesis Flood*, published by the Institute for Creation Research of San Diego, California, is probably most controversial for atmospheric scientists when it proposes that the conditions which led to the onset of the ice age were caused by a world-wide upheaval described in the Bible as the Flood of Noah. The transition from a uniform world-wide equable climate to the current warm equator, cold-poles climate is also new territory. However, if warm oceans and cold continents were present, as described by Oard, most atmospheric scientists would likely agree that they would be the primary driving force for an ice age. Mr. Oard recognizes much additional research yet needs to be done, but he has laid out the general framework for future research, much in the manner of what Whitcomb and Morris (1961) did in *The Genesis Flood* for geology.

This monograph is a must for any creationist who would seriously address the geophysical evidence for the "ice ages." For non-creationists, this work is a major piece of evidence that challenges current explanations of earth history. It provides alternative explanations to the standard, non-theistic myths developed in government laboratories and universities which ignore truth revealed in Scripture.

Reference

Whitcomb, J. C. and H. M. Morris. 1961. *The Genesis Flood*. Presbyterian and Reformed Publishing. Philadelphia.

Is God a Creationist? The Religious Case Against Creation-Science, Edited by Roland Mushat Frye. 1983. Charles Scribners Sons, New York. 205 pages. \$15.95.

Reviewed by Clifford L. Lillo*

Frye has gathered together articles written by 11 others and has added two essays of his own. He says,

The individual authors together represent a broad religious spectrum . . . each is religiously committed to one of the major traditions of Protestantism, Roman Catholicism, or Judaism . . . (p. 1).

He states that he does not wish to present any arguments with respect to the creationist's scientific case because the appraisal of the scientific community:

. . . is overwhelmingly negative . . . We will therefore not consider that side of the question . . . but will instead concentrate upon the religious issues involved (p. 3).

Such an approach is patently absurd. How can creation science be discussed without considering science?

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Nevertheless, with that as his premise, how well does he do? Most of the book is actually devoted to opposing the scientific premise of creationism, rather than presenting religious issues. In his own section, Frye mentions the creation of the earth by God in six days and says,

Clearly, the Hebrew word *yom* cannot here be calibrated into a specific chronological measure as creation-science presupposes; it must be understood, not as an inflexible twenty-four hour unit, but as a time of flexible and uncertain duration, within the overall symbolic context of biblical parable (p. 14).

Thus, Frye's basis for argument is not logic, but his own self-proclaimed fiat. He continues in the next paragraph to claim that Job 38 "suggests that the creation occurred on a single morning during which 'the morning stars sang together'" (p. 14). This would be a good example of Scripture interpreting Scripture, were it true. However, a check of Job 38 shows no reference to a single morning.

As to Frye's religious experts, he begins with Edwin A. Olson, a professor of geology and physics. According to Frye's own summary, Olson:

. . . gives a balanced introduction to the basic issues, defining terms, explaining what constitutes genuine science, and approaching all sides in the controversy with what might best be called an existential sympathy and understanding (p. 31).

What of the religious arguments against creation-science by people from "a broad religious spectrum"? There are no such arguments in Olson's essay. Frye continues with Richard W. Berry, professor of geology. He is identified as a layman prominent in the affairs of the Presbyterian Church (p. 43). Berry, like Olson, presents no religious arguments, but says,

Creationists find the theory of evolution to be very threatening . . . Exactly why evolution is so threatening is not obvious. Evolutionists intend no threat to the God story (p. 47).

Then Langdon Gilkey, a professor of theology at a divinity school, presents an essay containing,

reflections on various important issues represented in that case [i.e., overturning of the Arkansas law that required equal time be given to creation-science where evolution was taught in the schools] (p. 56).

Again, no religious arguments against creationism are presented.

Bruce Vawter, author of two books on Genesis and "one of the most widely respected Roman Catholic biblical scholars in America today" (p. 71), presents "a classic and exemplary critique of the arguments for creation-science" (p. 71). Like the others, Vawter presents no religious arguments, but, like Frye, simply makes declarations, portions of which there is no disagreement. For instance, he says,

The Bible [to the fundamentalist mind] is no longer a source-book for religion, it is primarily a source of knowledge, sacred and profane. . . in short, a divine encyclopedia of all relevant knowl-

edge dropped down from the heavens as the only righteous guide to life (p. 75, 76).

Certainly, Vawter himself must agree that the Bible is the only righteous guide to life. But, the rest of his statement is ridiculous. Does any Christian think of the Bible as *primarily* a source of profane knowledge? Does any Christian think of the Bible as not being a source-book for religion?

Then we come to Davis A. Young, professor of geology, who authored two books* "devoted to separating evangelical theology from young-earth and creation-science theories" (p. 83). He presents no arguments from a religious viewpoint; he simply states:

. . . the teachings of the creationists are simply not in accord with the facts. . . Flood geology, which has been endorsed so enthusiastically by some well-meaning Christian leaders, is nothing more than a fantasy. . . No non-Christian geologist is ever going to accept Flood geology or the young-Earth theory today: the flaws and weaknesses are obvious to any practicing geologist" (pp. 85, 86).

Creationists know that Dr. Henry Morris himself is a geologist who saw the flaws in the old earth theory.

Conrad Hyers, professor of comparative mythology and the history of religions, whose most recent book is *The Comic Vision and the Christian Faith: A Celebration of Life and Laughter* ridicules Biblical liberalism. He says, Biblical liberalism, in its treatment of the days of creation, substitutes a modern arithmetical reading for the original symbolic one (p. 99). However, he too gives no religious arguments.

According to Frye, "Asa Gray (1810-1888) is one of the acknowledged folk heroes of science . . . The only essayist in this anthology who is not still living . . ." (p. 107). Gray, a professor of natural history, gave lectures at Yale Divinity School, and his essay in this book is one of those lectures. What is his argument against creationism? He said,

Here, it may be remarked that natural selection by itself is not an hypothesis, nor even a theory. It is a truth . . . The *hypothesis* based on this principle is, that the struggle for life and survival of only the fittest among individuals . . . will account for the diversification of the species and forms of vegetable and animal life . . . (p. 111)

Did he present any arguments to substantiate his claim? No, he too merely makes claims with no justification whatever.

Owen Gingerich, professor of astronomy and of the history of science, in a 1982 lecture here reproduced by Frye, described,

. . . the scientific scenario . . . for the first moments of creation. . . The physics ultimately fails as the nucleo-cosmologists push their calculations back to Time Zero but they get pretty close to the beginning, to 10^{-43} second (p. 121).

The most important point in this paragraph, and in his whole lecture, is that clause, "The physics ulti-

*Editor's Note: See *Science, Scripture and the Young Earth* by H. M. Morris and J. D. Morris for a rebuttal of many of Davis Young's arguments. Book review of this book in the Quarterly is CRSQ 27:110-11.

mately fails . . . " With that creationists can agree, and that puts the whole concept of the "Big Bang" in the mythological zone.

Nahum M. Sarna is called by Frye. "One of the most eminent Hebraic scholars in America today" (p. 115). Sarna quotes from Genesis and says,

The account culminated in the Sabbath, or divine cessation from creation which, to the Torah, is as much a part of the cosmic order as is the foregoing creativity. . . . It should be obvious that by the nature of things, none of these stories can possibly be the product of human memory, nor in any modern sense of the word scientific accounts of the origin and nature of the physical world. . . . Hence, it is a naive and futile exercise to attempt to reconcile the biblical accounts of creation with the findings of modern science (p. 156).

Why does Sarna waste the reader's time? If he does not acknowledge first of all that the Bible is the word of God, then that ends the discussion. Every creationist scientist will readily agree that if God did not inspire the Biblical writers, then anything written about the origin of the heavens, the earth, and all that is therein is myth. Thus, Sarna has not presented any arguments at all against creationism and his essay does not belong in this book,

Another "widely recognized master of Old Testament study," according to Frye, is Bernhard W. Anderson. In an essay first published in 1955, Anderson brings in the much discredited J and P concept which claims that different authors contributed to the writing of Genesis, and because of that we today must refuse to accept it as the words of Moses or of divine inspiration. Anderson is the only writer in the whole book who quotes extensively from the Bible, but he,

like several of the others, does not believe that the creation account was inspired by God. Rather it was simply an account written by naive humans.

Nowhere in any of these articles has a religious case against creation-science been given. There is one other specialist, the Roman Catholic Pope, John Paul II. In two sections called, "Faith, Science and the Search for Truth," and "Science and the Church," the pope expounds at length about science but not about creation-science. Finally, in a third section, he states.

The Bible itself speaks to us of the origin of the universe and its makeup, not in order to provide us with a scientific treatise, but in order to state the correct relationships of man with God and with the universe. Sacred scripture wishes simply to declare that the world was created by God, and in order to teach this truth it expresses itself in the terms of the cosmology in use at the time of the writer. . . . Any other teaching [in the Bible] about the origin and makeup of the universe is alien to the intentions of the Bible, which does not wish to teach how heaven was made but how one goes to heaven (p. 153).

What Scripture passages does the pope use to explain his position? None. He simply says, "Science cannot of itself solve this question [i.e., the universe's beginning] . . . there is needed above all the knowledge that comes from God's revelation" (p. 53).

It becomes obvious that Frye has failed miserably in his attempt to present the religious case against creation-science. True, he has quoted some scientists who make a god of science, and from some religious people who are not in agreement with a literal interpretation of the Bible. However, he has not presented a case from a logical standpoint nor from the position of letting Scripture interpret Scripture.

LETTERS TO THE EDITOR

Reply to Gentry

The most reasonable conclusion from the scientific data at hand is that "radioisotope half lives and basic laws' have not changed 'over the time geological formations have been in existence.'" Let us face the facts and accept the restriction that a contrary view must depend on inspired or eyewitness testimony, just as neighbors or husbands who were not on the Galilean hillside with Jesus had to (and we also have to) accept the testimony reported in Matthew 14:20, Mark 6:43, Luke 9:17, and John 6:13 concerning 12 baskets of fish and bread. No analysis based on the techniques of physics, chemistry, or biology will prove the validity of these accounts.

We can each be thankful that God is a uniformitarian, that we can depend on His activities, that we can "do science." And we should be grateful that He departs from a uniform pattern whenever His judgment and love indicates that the universe would be better served by a nonuniform development.

Radiometric "ages" tell something about the mineral in which an organism was buried, but do not necessarily specify *when* the burial occurred, any more than radiometric data for soil and rocks in a cemetery

specify the dates of interment. Fission track ages are not made invalid by contamination; but they may be modified by annealing. If properly corrected for annealing loss, a fission track age might relate to a pattern produced at initial creation, and/or the passage of time since a creation event. [Many Biblical creationists hold closely to God's definitions in Genesis 1:8-10, and allow for the possibility that His creative activities have extended over a universe of both time and space.] There is no restriction concerning the fission track "age" characteristics of minerals with which or under which plants and animals were buried as a result of the Flood.

In developing my paper on constancy of natural law, I endeavored to maintain a phenomenological, descriptive treatment, and avoid dependence on any theoretical model other than acceptance of the evidence for both short and long range forces between nucleons in an atomic nucleus. I endeavored to base my conclusions on the same *observations* that quantum mechanical theory seeks to "explain."

I regret if anyone interprets my statement concerning association of polonium halos and complete uranium halo sets to specify their appearance together in

most fields of microscopic view. The remarkable Spectacle Halo (Gentry, et al., 1974; *Nature* 252:564) impressively demonstrates that microscopic regions may have a concentration of polonium halos alone. But complete uranium radiohalo sets are present in minerals which contain polonium radiohalos, sometimes sufficiently closely associated to be overlapping. Polonium halos are only found in minerals which are also characterized by association with uranium. Only one clearly identified association between a uranium radiohalo set and an isolated polonium radiohalo ring or set within the same field of microscopic view is a fact of nature that calls for explanation in harmony with the explanations proposed for all other associated observations.

That there are radiohalo rings whose radii correlate with polonium alpha-particle energies and which have no polonium at their center is unquestioned. That the same minerals may also contain uranium radiohalo sets has also been amply demonstrated. Uranium atoms are always located as an impurity (foreign) concentration at the center of such rings. As far as I have been able to determine, the process by which uranium was located as a crystal lattice impurity at distinct and separated locations is not understood. There is a similar lack of understanding regarding the distinct and separated previous locations of polonium that are identified by polonium halos. With this deficiency in our understanding, I do not see a basis for affirming that polonium was never deposited at a location which had received, or was simultaneously receiving, uranium. Nor do I see a basis for affirming that uranium could not have been deposited at a polonium halo center. Either case would produce a uranium ring set with excessively dark polonium rings.

Perplexity over the apparent variation in the density pattern from inner to outer ring among uranium radiohalo sets has led me to this consideration. I thought it was worth a passing mention in discussion of evidence concerning the constancy of natural process rates. What other evidence might there be for coincident or subsequent polonium accumulation at uranium radiohalo ring set centers? I find nothing in *Science* 184:64-66 (1974) as referenced by Gentry or in any other investigative report, that excludes the possibility of an enriched or independent deposit of polonium at a uranium radiohalo center site. Whether such combined deposit has or has not occurred, radiohalos do provide evidence for essential constancy of basic natural process rates.

As a conclusion to these brief comments, I want to express my appreciation for Robert Gentry's collection of data on the fascinating phenomena of radiohalos, and my commendation for his commitment to the support and promotion of Biblical creationism.

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The Fall of Evolution*

Cooperative efforts between the Soviet Union and the U.S. in the recent Kuwaiti crisis remind us of the speed of change occurring in a single year throughout the world. Even skeptics regard the apparent failure

of communism, long thought of as an inadequate portrayal of man, as genuine. What contributed to the fall of communism and to the discredit of socialism in general? What changes may be ahead for our own society? Certainly many things have contributed to the disinterest in revolutionary socialism, and certainly many changes are to be expected. Yet one thought is largely ignored.

The philosophic concept, rooted in modern thinking, both in the East and West, having given rise to socialism since the time of Karl Marx (1818-1883), has also been the undoing to that inadequate, oppressive world view. Marx and Engels put *The Communist Manifesto* on paper in 1848. Darwin and Wallace, providing the philosophic underpinnings, did not go into print with the theory of evolution by natural selection until ten years later. Nevertheless, seizing upon Darwinism as an antidote to traditional Christianity, Marx saw a "scientific" justification for his view of man as weak, beguileable, easily led. At one point he even offered to dedicate a later edition of *The Manifesto* to Darwin.

Here is the problem evident in neoteric world-life views: man is gullible, open to manipulation by an elite. In the West, Darwinism and the various successor theories—gradualism, punctationalism—have given rise to the biological and social ideas of Jacques Monod, Francis Crick, and B. F. Skinner. Moving from Darwin, each has characterized the world as motivated by mindless chance. Taking biologic evolution to its logical conclusion, Skinner, the behaviorist who taught manipulation as the only recourse in life, promoted the abolition of autonomous man. Against this idea the people of the Eastern Block nations have arisen.

It is now understood, though evolutionism still holds enormous influence in both the East and the West, its portrayal of man, its inability to provide an answer as to why man *should* have dignity or *has* dignity at all, has been a giant intellectual failure. Indeed, if this philosophy were truly lived out by its proponents—as Skinner attempted—values such as equity, equality, compassion, community, law would not, ought not to exist. Why should they exist? As Skinner suggested: "To man as man we readily say good riddance."

The point of tension in this philosophy is that proponents, especially the university academic and intellectual, refuse to live in a place of consistency in their system *and* the real world. Modern men and women must be brought to face the logical conclusions of their non-Christian presuppositions. A view of the world incapable of providing answers for *why* man is capable, worthy of dignity, individual distinction, or respect, yet simultaneously retaining a "belief" in cosmic optimism, is doomed to failure. The philosophic inconsistency of biologic evolution is a glaring warning to adherents.

After the fall of communism, expect the collapse of the biological-evolutionary world-life view.

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*Editor's note: This letter is reprinted by permission from *The Lariat*, a Baylor University publication.

The Dry Land—A Creative Act?

"Let the dry (land) appear" Genesis 1:9b.

". . . His hands formed the dry (land)" Psalm 95:5.

While our concepts as to the interior structure, state and composition of the Earth must remain matters of inference, we do have considerable direct, observable, factual information about the crust. In particular, we know that the crust under the oceans differs markedly from the continental crust. To quote one author, "The continents are not simply elevated sections of a uniform crust; they differ fundamentally from the low-lying ocean basins" (Trewartha, et al., p. 203). These differences may be defined as:

Depth: Estimates of depth average 32-40 km for the continental crust and 6-7 km for the oceanic crust.

Composition: The continental crust is granitic, silicon and aluminium dominating—SIAL; the oceanic crust is basaltic, silicon and magnesium dominating—SIMA.

Density: The continental crust density is 2.7g/cm³; the oceanic crust 3.0g/cm³.

Further, it is generally agreed that the SIMA layer is continuous and that the discrete SIAL masses float on top of denser SIMA; much as a piece of low density wood would float on a piece of higher density wood in water. How this came to be is a matter of conjecture in geologic circles.

Little is known about the origin of the extensive 'rafts' of granitic rocks that form the continents. . . . Why the low density granitic crustal material should be concentrated in large patches that occupy only a third of the Earth's surface remains a mystery. . . . It remains true that neither the existence nor the pattern of occurrence of the largest of all geographic features—the continents, ocean basins, and the great mountain belts—can at present be accounted for with any certainty (Trewartha, et al., pp. 204, 218-219).

Of course, the 'mystery' as such is seen against the background of mainline geologic assumptions regarding origins: most, if not all, theorizing starts at the point of a shrinking and cooling Earth and the existence of convectional currents in the mantle. That these assumptions conflict with the evidence is plainly apparent. The mystery of the continents compares in magnitude with another mystery: the eternal optimism of some scientists that continual investigation will, in the end, win through to explain in acceptable and traditional terms what is plainly unexplainable. The alternative of the Genesis account is discarded as fable for the uninformed. But the Scripture is plainly informative nevertheless; Genesis 1:9 and Psalm 95:5 report that God (Elohim) not only commanded the dry (land) to appear (Hebrew 'raah') but formed it with His hands!

The Hebrew 'raah' is used in the Masoretic text 66 times. The following is a summary of this usage grouped into five categories.

- Appearances of the Lord to man 38 references
- Appearances of man before the Lord 15 references
- Appearances in visions (Ezekiel) 7 references
- Appearances on a man's face-shame, etc. 3 references
- Creative appearances 3 references

It is clear from this summary that implicit in the meaning of 'raah' is the idea of coming from the spiritual to the physical or vice versa. In other words, creative acts. The use of 'raah' in Genesis 1:9 can be taken as an encouragement that the granitic rafts resulted, not from some minor adjustment to the initial creative act but from a special creative act on Day Three. The granitic rafts are there because God made them appear.

Reference

Trewartha, G. T., A. H. Robinson and E. H. Hammond. 1967. Elements of geography. McGraw Hill. New York.

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Archaeopteryx and a Cornish Rock

I could kick myself hard now because we ate the evidence! Last year I obtained a large, white, young rooster. He looked like a Cornish Rock but was huge, though just a few weeks old. The chicken was actually a Peterson-Hubbard cross variety. My idea was to use him as a breeder in our tiny family flock so we might raise eating chickens. He was so docile that the hens drove him into a corner. Since we had other chickens, I decided I would not finance his appetite but rather would feed him to our family.

Noticing he had claws on his wings I laughed to myself, remembering *Archaeopteryx* and the description that fossil feathers appeared similar to chicken feathers. Apparently, all Cornish Rock chickens have claws on their wings, like *Archaeopteryx*.

I decided to order a bunch of chicks this year and take pictures. Cornish Rock is a new breed for me; and now that I have begun to look for a hatchery, I realize that my bird was rare. He was given to a person in Gonzales, Texas, by a local hatchery, and was a cull. We are searching for another such chicken. If successful, I want it in the hands of someone who is doing research in this area.

The wing of my "Archie" had a digit with a claw attached to the outside of the first joint of the wings. It curled inward toward his face. When relaxed it lay in line with the wing, pointing toward the tip of the wing. He seemed to draw the claw in or extend it at will and even appeared to use it, along with his wings, as a defense.

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