

# Science

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## ATHEISTIC EVOLUTION RESOURCE PAGES

by Kurt P. Wise

### Claims of Atheistic Evolution:

1. The physical universe is all there is. There is no God, no spirit world, no afterlife, no soul, and no basis for morality. [This seems to run counter to the compelling evidence for a God, evidence for soul/spirit, morality, and the ubiquitous belief in the spirit world and the afterlife.]
2. The origin of the universe was the beginning of all that is (space, time, matter, and natural law) and began spontaneously without cause as an infinitesimally small highly compact mass of energy (just as in quantum mechanic events in the world of the extremely small seem to occur without cause). [Spontaneous generation of something from nothing seems more difficult to accept than creation of everything physical by some uncaused non-physical first cause]
3. Cosmogogenesis theories (the most popular being Big Bang Theory) seek to explain the origin of the universe and its major structures. According to Big Bang Theory, 10-14 billion years ago as the universe expanded from this initial state, slight non-uniformities in the initial substance acted upon by natural law and process, produced the major structures of the universe, including the ratios of the light elements and the large clouds which would form galaxies. A very powerful (and successful) prediction of the Big Bang Theory was the uniform, microwave, blackbody spectrum of radiation coming from outer space. [Observations which are challenges for Big Bang Theory: the anthropic principle observations (*e.g.* Barrow & Tipler, 1985); the largest structures of the universe (superclusters up to the >Great Wall=) which seem to take too long to be formed by gravity (Lerner, 1992); stars which seem to be older than the universe; and the seeming necessity to deduce a Creator when the beginning of the universe is demanded by the evidence]
4. Galactic Evolution Theories seek to explain how the rotating clouds of hydrogen and helium left over from the Big Bang Theory produced galactic structures. [Galactic evolution theories have low explanatory and predictive power.]
5. Stellar Evolution Theories seek to explain how the smaller rotating clouds of gases left over from galactic evolution and stellar explosions produce new stars and then evolve into the full variety of stellar objects known. [It has always been challenging to find successful mechanisms for compacting expanding gas clouds into stars.]
6. Solar System Evolution Theories seek to explain how a rotating cloud of gas which was contracting to become our Sun produced, in the process, all the objects of the Solar System, including the planets, the moons, the comets, the asteroids, and the dust. [Challenges to solar system theories include: the diversity of magnetic fields, moons, planetary compositions, and rotational behaviors; the rapid loss of interplanetary dust (Slusher & Robertson, 1982) and comets (Faulkner, 1998); the strong ancient magnetic fields of the Moon and Mars; the distinct composition of the Earth and Moon combined with a very regular orbit]
7. Plate Tectonics Theory seeks to explain the major features of the earth=s crustal structure based on slow (centimeters per year) overturn of the earth=s crust and mantle. Plate tectonics (a combination of continental drift theory and sea-floor spreading theory) seems to explain a tremendous amount of geologic and paleontologic data and (impressively) predicted the nature of transform faults before they were known. [Challenges to Plate Tectonics Theory at traditionally understood slow rates: the existence of high pressure/low temperature minerals in mountain cores; seismic tomography which suggests cold material at the core/mantle boundary; rapid magnetic reversals; blotchy sea-floor magnetic reversal pattern; low paleomagnetic and high archaeomagnetic intensities; seemingly inconsistent magnetic reversal frequencies; earthquake intensities sufficient to explain low-angle thrusts and detachments; earthquake activity in old mountain chains; secular temperature increase from the Cambrian through the Paleozoic and Mesozoic; superplumes; and evidence for catastrophic overturn of Venus=s crust in the past (Austin, *et al.*, 1994)]
8. Ice Age Theories seek to explain the evidence for continental glaciation and the current distribution of ice in Greenland and Antarctica. [Challenges to Ice Age Theories: ice-free areas; no glacial rebound evidence in the upper Midwest; lack of interglacial flora and fauna; secular temperature drop throughout the Cenozoic; and megafaunal extinction (*e.g.* the mammoths)]
9. Abiogenesis Theories seek to explain the origin of the first cell (*i.e.* the first life) by spontaneous generation of atmospheric gases by lightning, UV radiation and/or heat to produce biomonomers which polymerize by natural law and process to produce organic molecules which then combine to form the first cell. [Challenges to Abiogenesis Theories: oxygen, which destroys such processes seems impossible to avoid on the early earth; the late stages of the earth=s bombardment (which should have destroyed all life) overlap with the oldest fossils; individual laboratory simulations are incapable of duplicating two successive steps -- ending in each case in

- organic goo; all known natural processes produce racemic mixtures; no known natural process produces the specific kind of polymerization necessary for biologically significant molecules; and no natural process is known to be able to overcome thermodynamic challenges (Thaxton, *et al.* 1984; Bradley and Thaxton, 1994)]
10. Megaevolution Theories seek to explain the origin of the diversity and hierarchal structure of groups of living things by spontaneous modification of organismal form perfected by natural selection over time. [Challenges to Megaevolution Evolution Theories: stratomorphic intermediates are rare (in fact virtually non-existent among invertebrates) and the chimeromorphic nature of those that are found; stasis and abrupt appearance of organisms in the fossil record; the Cambrian Explosion of animals at the base of the Cambrian and the >Archaean Explosion= of bacteria at the base of the Archaean; the complexity of organisms; the apparent irreducible complexity in organisms and their structures; the unnecessary beauty of organisms; the ubiquity of homoplasy and low consistency index of phylogenetic trees; and the lack of intermediate structures in the present or in the fossil record (Johnson, 1991; Bird, 1992; Denton, 1996; Behe, 1996)]
  11. Human Evolution Theories seek to explain the origin of humans by modification of non-human primates over thousands to millions of years of time. [Challenges to Human Evolution Theories: the apparent irreducible complexity of human language capacity; evidence of the soul and spirit]
  12. Linguistic Evolution Theories seek to explain the origin and diversification of human languages by gradual transition from animal communication sounds over thousands of years of time. [Challenges to Linguistic Evolution Theories: the great disparity of languages in the world today; the large differences between the major language groups; the rapid evolution of modern languages; the recency and disparity of written languages]
  13. Cultural Evolution Theories seek to explain the origin and change of human culture (*e.g.* through Stone Age, Bronze Age, and Iron Age cultures) by gradual transition from animal eating behaviors. [Challenges to Culture Evolution Theories: the evidence of astonishing ancient human technologies; the Ice Man found frozen in the Alps]

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**Key Evolutionists:**

Charles Darwin (1809-1882), *biology* (organism-level natural selection)  
Richard Dawkins (1941- ) (Oxford), *zoology* (gene-level selection; blind watchmaker)  
Jared Diamond (1941- ) (UCLA), *biology*  
Stephen Jay Gould (1941-2002), *paleontology* (punctuated equilibria)  
Stephen Hawking (1942- ) (Cambridge), *cosmogony* (a brief history of time)  
Ernst Mayr (1904- ) (Harvard), *biology*  
Carl Sagan (1934-1996), *astronomy*  
Steven M. Stanley (c.1941- ) (Johns Hopkins), *paleontology* (species-level selection)

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## THE SPECTRUM OF CHRISTIAN POSITIONS ON GENESIS

by Kurt P. Wise

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- I) **INTRODUCTION.** There is a wide spectrum of positions on creation held by believers. This summary is intended as a guide in understanding that spectrum of positions.
- A) The dominant understanding of creation for most of the history of both the Hebrews and the Church has been more or less a young-age creationist position (the earth and universe created about 4000 B.C., Genesis 1-11 as literal history including creation in a week, a literal Adam and Eve, a literal Fall, a global flood, and a literal Babel).
- B) Although alternate histories have been advocated from time to time, it is almost always a modification of the biblical account in order to conform to extra-Biblical >knowledge= (e.g. Augustine, in the 5<sup>th</sup> Century, offered a re-interpretation of Genesis because he couldn=t understand how God would take as long as a week to create and Gersonides, in the 14<sup>th</sup> Century, advocated a structural understanding of Genesis to fit Aristotelian cosmology). Beginning in the 19<sup>th</sup> Century, due to both Biblical higher criticism and the challenges of geological and evolutionary sciences, alternate histories have become more common B usually as attempts to conform biblical claims with evolutionary process and geological time.
- II) **GENRE OF GENESIS ONE:** The literary genre of a passage determines how that passage is to be understood.
- A) The traditional understanding is that Genesis One is **historical narrative** (i.e. a true history of events). Besides the preponderance of Hebrew and Church leaders who have accepted this down through the millennia, evidences consistent with this genre and inconsistent with other genres include (Kaiser, 1970; Phillips & Fouts, 1999): a clear sequence of events; the use of *waw* consecutive with the verb (AAnd such and such occurred... and such and such occurred...etc.) to describe those events; frequent use of the direct object sign and relative pronoun; repeated use of definitions; focus on the physical world; seamless transition to historical narrative to follow; and reference to Genesis One by later Scriptural writers (e.g. Exo. 20:10-11)
- B) Alternate genres suggested in last couple centuries have included prophecy, poetry, non-historical narrative (e.g. tale, legend, fable, and myth), and unique creation genre.
- a) re: prophecy & poetry. Since Genesis One does not have the necessary characteristics of either prophecy or poetry, the text should be understood as narrative (Fouts, 2003). Neither prophecy nor poetry is commonly advocated as Genesis One genre.
- b) re: non-historical narrative. Evangelical Christians who believe the Scripture to be inerrant tend to reject tale, legend, fable, and myth, but non-evangelicals do commonly (and some evangelicals, uncommonly) defend these positions in mainline denominations and seminaries.
- c) re: unique creation genre. The purposely complex structure and beauty of Genesis One has compelled an increasing number of evangelicals to claim that Genesis One is a unique genre B a special >creation genre=. However, since there is no evidence in any ancient Near Eastern literature for such a genre, this claim is *ad hoc* (Fouts, 2003). Also, structure and beauty are known from other historical narrative texts in Scripture, and might be expected from the Author (II Ti. 3:16), Who is, after all, the

God of wisdom and beauty.

- d) In the evangelical world, it is becoming increasingly popular in some circles to advocate what is called a **Literary Framework Hypothesis** (or just Framework Hypothesis or Literary Hypothesis) for the interpretation of Genesis One. This is rather like a slight variation on historical narrative. In a literary framework understanding, the >days= of Genesis One are rather like chapters in a book of the history of creation, relating actual events in creation, but doing so thematically, not necessarily relating creation in the order it occurred, nor specifying the time it actually took to occur. This approach has no good explanation for either dropping the perspicuous understanding of the text, or for why the very familiar >day= was used to denote sections of narrative which in the theory have nothing to do with time or sequence.

### III) TEMPO OF CREATION (TIME IN GENESIS ONE)

- A) The traditional understanding is that Genesis One covers one week of time (7 rotations of the earth, or 7 24-hour days at the current rotation rate). Besides the preponderance of Hebrew and Church leaders who have accepted this down through the millennia, evidences in favor of this understanding include: the definitions of >day= provided at its first use (Gen. 1:5) suggest that day refers to the light period of a day/night cycle and to one day/night cycle; the perspicuous reading of the text; the equivalence of human work days with divine work days in Exodus 20:10-11; the extreme brevity of the Creation Week indicated by the creation of Eve being >at the beginning= (Matt. 19:4-6; Mark 10:6-8), humans knowing the truth >from the foundations of the earth= (Isa. 40:21-22), and Abel living >at the foundation of the world= (Luke 11:50-51); and the widespread use of a week as a time-marker even though there is no astronomical foundation for it (Fouts & Wise, 1999; Wise, 2002).
- B) In the last couple centuries, the time span of Genesis One has been extended by many believers to allow it to accommodate the millions of years of earth history (>deep time=) advocated by the geological and astronomical sciences. In Christian academia, an ancient earth has been widely accepted since the early 19<sup>th</sup> Century. In that time the Christian community has never arrived at any consensus about how deep time is to be accommodated in the Genesis account. Three different methods have predominated:
- a) Claiming that >day= is not a time indicator at all B usually by advocating an alternate genre (*e.g.* prophecy, poetry, tale, legend, fable, myth, or literary framework). This method is most common in mainline denominations and among liberal biblical scholars. See the previous section of the genre of Genesis One for comments on this suggestion.
- b) Claiming that >day= refers to a longer period of time than 24 hours (*e.g.* millions of years) B often referred to as the **Day-Age Theory**. Arguably, this has been the most popular method among scientists for reconciling deep time with Scripture. Challenges which this proposal encounters while others do not include: the definitions of >day= provided at the word's first usage (Gen. 1:5, where it refers to the light period of a day/night cycle as well as one day/night cycle) and elsewhere in Scripture both the phrase >evening and morning= and the word >day= when used with ordinal numbers (2<sup>nd</sup>, 3<sup>rd</sup>, *etc.*) refer only to 24-hour periods of time.
- c) Claiming there is one or more time gaps in the account. The several variations on this idea include
- (i) A gap *before* the days (*i.e.* a huge time gap between the creation and the six days of creation). The most popular form of this theory is the **Revelation Theory**, which suggests that the six days were six days during which God revealed the creation to Moses while he was 40 days on Mt. Sinai.
- (ii) A gap *after* the days (*i.e.* a huge time gap between the end of the six days and the appearance of Adam). The most popular form of this theory is the **Divine Command Theory**, which suggests that God set aside 6 days of time billions of years ago to command the creation into being, then watched for billions of years as the creation obeyed His command.
- (iii) Gaps *between* the days (*i.e.* a day of command followed a long period of fulfillment, followed by a day of command followed by a long period of fulfillment, *etc.*). This is called the **Inter-Day Gap Theory**.
- (iv) One or more gaps *within* the days of creation. The most popular form of this theory is the **Ruin and Reconstruction Theory**, or, more popularly, just the **Gap Theory**. Following its popularization by Scofield, this theory became, for theologians, anyway, the dominant way to reconcile the Bible and deep time in the first half of the 20<sup>th</sup> Century. In this theory, Genesis 1:1 describes God creating an entire perfect creation a very long time before the creation related in the following verses. Genesis 1:2 is thought to describe the state of that first creation after it was judged and destroyed. Genesis 1:3 and following relates the re-creation of the earth.

- d) The various gap theories and the day-age theory all struggle in common with a number of biblical and theological issues, including: Exo. 20:11 (part of the 10 commandments and written on stone by the very hand of God) claims that the creation of the heavens and the earth (Gen. 1:1), the seas and all that in them is (Gen. 1:2-31) occurred in 6 days, just as we humans are to work six days; the extreme brevity of the Creation Week indicated by the creation of Eve being >at the beginning= (Matt. 19:4-6; Mark 10:6-8), humans knowing the truth >from the foundations of the earth= (Isa. 40:21-22), and Abel living >at the foundation of the world= (Luke 11:50-51); a perspicuous reading of Genesis One leads to none of these positions; only a very small minority of Hebrew and Church leaders down through the millennia have deviated from a 7 24-hour day understanding of Genesis One; and since God is independent of time, it would be God=s nature to instantaneously, so although one could advocate instantaneous creation based upon His nature (as did Augustine) or advocate a week-long creation as an example for man=s sabbath (Exo. 20:8-11; Mark 2:27), no justification is known for taking any longer period to create than that.
- e) Positions which argue for great antiquity of the creation because of geological and astronomical indicators of time struggle with a number of other Biblical problems. This is because with the acceptance of geological and astronomical time, one accepts the ages of astronomical bodies and the earth=s rocks and contained fossils at millions and billions of years before present. Keeping in mind that time information in Scripture indicates Adam was created about 6000 years ago (and cannot have been created even as long ago as 9000 years ago), all this would suggest that *before the creation of Adam* the following occurred: over 3 billion years of 100's of thousands (inferentially billions) of extinctions; 2 billion years of billions (inferentially billions of billions) of animal deaths; 2 billion years of carnivory (animals eating other animals); 2 billion years of disease; 2 billion years of suffering; 10's of millions of years of thorns and thistles; over 1.5 million years of short-lived, omnivorous, racially distinguishable humans, both male and female, lived and died across all the Old World; hundreds of thousands of years of tool-making by humans; and thousands of years of agriculture and city-building by humans. Also suggested by the geologic record: sea creatures appeared about 100 million years before plants appeared and 400 million years before fruit trees did; land animals appeared before the flying creatures; the Tigris, Euphrates, and Gihon (Nile) rivers (now on two different continents) were never all connected; a global Flood never occurred B certainly in the days of Noah.
- (i) This in turn would suggest that *the Bible is grossly wrong* (Gen. 1: Creation in 6 days; Gen. 1:11-23: creation of plants before sea creatures; Gen. 1:20-25: creation of flying animals before land animals; Ge. 1:29; 9:3: humans did not eat meat before Noah; Gen. 1:30: animals did not eat meat before Adam=s fall; Ge. 2:7: the first man, Adam, was created from the ground; Ge. 2:8-14: the Tigris, Euphrates, Gihon, and Pison rivers flowed out of Eden and parted from there; Ge. 2:19-20: Adam was able to name all the flying and land animals (including those extinct?); Ge. 2:21-2: the first woman was created from Adam=s side; Gen. 3:18: thorns and thistles didn=t exist before Adam=s sin; Gen. 3:20: Eve is the mother of all living humans; Gen. 4:20: the first nomadic herdsmen post-date Adam; Gen. 4:21: the first musical instruments post-date Adam; Gen. 5 & 11: humans lived for 900 years before Noah and hundreds of years for centuries after Noah; Gen. 6:19-20: all land animals were represented on the ark (including the extinct ones?); Gen. 6:9: Noah=s flood was global; Gen. 7:23, 11:1: after the Flood there was only one race; Gen. 10: all modern humans are descendant from Noah; Gen. 10:1-11:9: all humans dispersed from Babel). This means that 20% of the book of Genesis (chapters 1-11) would be *wrong*, which in turn challenges the accuracy of the 18 Old Testament and 7 New Testament books which refer to parts of Genesis 1-11 as if it was history.
- (ii) This, in turn, undermines all Christian doctrines. For example, the doctrine of Scripture (Ps. 19:7: The Bible is true; Mt. 5:18: The Bible is unchanging); of eschatology (Isa. 65:17: heaven will be perfect as was the first creation; Mt. 5:18: heaven will be a rest like God=s rest on Day 7 of the Creation Week; Mt. 5:18: Christ=s return will be global as was Noah=s Flood); of man (Rom. 5:12-18; 8:19-23: man=s sin led to animal and human death and suffering and disease; Rom 5:12-18: human death came by the sin of one man B Adam); of marriage (I Cor. 11:3-10: man is the head because the first woman, Eve, was made from man; Mt. 19:3-9: marriage unbreakable because the first marriage, of Adam and Eve, was made by God); of salvation (man was created in perfection and fell from perfection, so needs salvation that only God can provide); of God (Ps. 33:8-9: God is fearful in judgment because He created instantaneously; Ps. 100:3-5; II Ti. 3:16: Scripture is true because God is true; Ps. 100:3-5: God is merciful and good, but how can a God Who created with billions of years of death, disease, and suffering before man=s sin entered the

world be good?) (NOTE: The natural evils cannot be blamed on Satan, for Gen. 1:31 suggests that at the end of the Creation Week *everything* God had made was good. Also, even though Gen. 3:14-15 suggests that Satan was in the garden after he fell, Ezekial 28:12-17 also suggests that Satan was in Eden *before* he fell. Satan, therefore, did not fall before the creation; Satan fell after the creation and before he began tempting Eve.).

- IV) **MODE OF CREATION (GOD=S METHOD IN GENESIS ONE)** There is a considerable range of positions in the Christian community on how God created things. These models form an almost continuous spectrum of positions, often making distinctions among the positions very difficult. The models differ on the issue of how much of the present diversity of creation was directly created by God (*via* primary causation) and how much has been generated since His creation (*via* secondary causation).
- A) The traditional understanding is the **Young-Age Creation** model (aka young-earth creation). In this model Genesis One recounts a week of events during which God used primary causation to bring the initial universe and all its components into being. Subsequent to the Creation Week, secondary causation has changed and diversified many of those initial creations. Young-age creation history differs dramatically from secular history (*e.g.* some of the physical evidence of history was created; a different order of creation; a very different age of things; an initially perfect creation; a Fall and curse; a global Flood; a dispersion of people following the supernatural creation of language diversity). The events of the Creation Week in particular are observationally and inferentially distinct from atheistic evolution (*i.e.* discontinuous and impossible by natural law). Although the young-age creation model has on its side such things as the history of biblical interpretation, Scriptural perspecuity, and biblical data, it does require a reinterpretation of virtually all the data of modern science.
- B) In the last couple centuries (to accommodate Genesis One to secular views of universe history) a variety of alternate modes of creation have been suggested. They are **Old-Age Creation** models, where the events of billions of years of time are recounted in Genesis One and evidenced in the physical universe (*e.g.* the rock and fossil record of the earth). In the broadest sense, the history the universe proposed in these models does differ much from the secular history of the universe (*e.g.* the sequence, the ages, no perfect creation, no global flood). Although these models have the advantage of not having to reinterpret history as inferred by mainline science, this history seems to come into direct conflict with many biblical claims (see biblical problems with antiquity of the creation above).
- a) **Evolutionary Creation:** God=s primary causation generated the original universe (*e.g.* the  $t=0$ , expanding, infinitely dense and hot primordial atom of the Big Bang), pregnant with the ability to create its current structure and components *via* secondary causation (*i.e.* without any further divine intervention). Evolutionary creation would be both observationally and (except perhaps at the moment of the original creation) inferentially indistinguishable from atheistic evolution (*i.e.* continuous and according to natural law).
- b) **Continuous Creation** (aka Theistic Evolution): Throughout the universe=s history God=s primary causation has acted continuously at the level of the very small, to evolve the universe and all its components. Continuous creation would be observationally indistinguishable from atheistic evolution (*i.e.* continuous), but (at the small scale) inferentially >miraculous= (*i.e.* impossible or improbable by natural law).
- c) **Progressive Creation:** Throughout the billions of years of universe history, God has intervened frequently using primary causation (>special creation=) to generate fully formed objects. Subsequently, secondary causation (natural process) has changed and diversified many of these initial creations. Progressive creation would be both observationally and inferentially distinct from atheistic evolution (*i.e.* discontinuous and, at the discontinuities, impossible by natural law).
- d) Besides the general biblical and theological problems with antiquity (see above), there are data which pose additional problems for some of the old-age creation models.
- (i) There is physical data for design (*e.g.* generating universe structures larger than galaxies in only 14 billion years; anthropic principle evidences; condensing our Solar System=s diversity out of a single condensing gas cloud; creating the first cell from inorganic gases; complexity of biological organisms) which challenge evolutionary creation model.
- (ii) There is physical data for discontinuity (*e.g.* the sudden appearance of organismal communities in the fossil record, the appearance of disparity before diversity in the fossil record; the extreme rarity of stratomorphic intermediates in the fossil record) which challenge the evolutionary creation and continuous creation models.
- (iii) There is the biblical claim that humans were directly created by God from dirt, and not from

pre-existent animals (Gen. 2:7) which challenge the evolutionary creation and continuous creation models.

=> Among the old-age creation positions, the Progressive Creation model is most consistent with modern science=s perspective on extra-Biblical evidence.

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## DISCERNING QUALITY

by Kurt P. Wise

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I) **INTRODUCTION.** **Much** of the young-age creationist literature is deficient in quality. Deficiencies include the following: 1) incorrect (usually positivist) philosophy of science; 2) anti-evolutionary stance (which consequently has the evolutionists determining the creationist agenda); 3) improper characterization of evolutionary theory (*i.e.* straw man arguments); 4) disrespect of evolutionists; 5) use of outdated arguments; 6) inadequate citations of previous works; 7) mismatch between training of author and the subject of article; and 8) too few cooperatively-authored papers. Discernment is needed in identifying quality young-age creationist sources and the following is presented as a guide.

### II) PROPOSITIONS

A) God requires faith (Ro. 14:22-23; He. 11:6) and Biblical faith is a gift of God (Acts 17:31; Ro. 10:17; 12:3; Gal. 5:22; He. 12:2) which (when accepted) results in a confidence in the word/nature of God rather than the perception/reason of man (I Co. 2:5; II Co. 5:7; He. 11:1, 6; I Pe. 1:21).

=> **Proof is not possible.** (*e.g.* there is no such thing as proof in science; there is no proof of God in philosophy). In fact, the creation has been designed to allow humans enough freedom to deny the truth, to accept alternatives to truth offered by others; to build their own alternatives to truth; and even to powerfully defend alternatives to truth.

=> **Creation is By Faith.** Faith is not only required for salvation, it is required to believe in creation (He. 11:3). ==> Belief in creation is a miracle B a miraculous transformation of the heart induced by the Holy Spirit as He utilizes the Word of God.

B) God desires all men to come to Himself (John 3:16; II Pe. 3:9).

=> He has convinced people=s hearts of His existence & attributes (natural revelation) so they are without excuse (Ro. 1:18-20) ==> it=s not our responsibility to convince B only remind people of truth from His Word.

=> He created in such a way that the creation account is a polemic against every creation myth humans would ever devise.

=> He left compelling evidence (but not demonstrative proof) of His existence and creatorship in those things which are made (apologetics)

=> He created in such a way that physical anomalies exist (but not demonstrative proof) against every creation myth humans would ever devise.

=> He pre-evangelized all cultures of the world in very powerful and specific ways (*e.g.* the altars to the God with no name in Athens; the peacechild; Biblical history in ancient Chinese script)

=> He gave us His Word (eyewitness creation account), and His Spirit to actively draw people to Himself.

It is evident that **God=s heart is for people** and so should our heart be also.

C) We are in a battle (Eph. 6:10-18), but it is against spritual powers, not flesh and blood (vs. 12) B *i.e.* it is not against humans ==> **evolutionists or even their theories are not our enemies.**

D) **Satan=s lies and arguments (*e.g.* evolution) are very powerful**, very reasonable, very well evidenced.

They are also exceedingly dangerous and should never be underestimated.

E) We are ambassadors for Christ, so **our behavior should be beyond reproach**, our ethics should be impressive even to unbelievers, and whatever we do we should do it well B as unto God.

III) **DEDUCTIONS.** From the foregoing claims, we deduce that the following activities are wrong (sin):

- A) mocking, humiliating (*e.g.* in public debate, protest or challenge), or praying evil upon evolutionists B or any human. *Rather* respect and pray for good for all men, because 1) every human is a soul for whom Christ died, 2) every human is created in the image of God, and 3) every unbeliever is a victim of Satan=s deceit and in need of the truth believers possess.
- B) focusing on the criticism of evolutionary theory. *Rather* focus on understanding, building, and presenting the truth about the history of the creation (analogous to focusing on presenting the good news (gospel) rather than a condemnation of sin).
- C) claiming or implying evolutionary theory is silly, weak, or poorly evidenced, for not only is this a lie, but it puts those who believe it in great danger B especially our children B something for which we will have to give account before God. *Rather*, warn people of the trap of the reasonable, well-defended claims of Satan (including evolutionary theory).
- D) seeking to defend, prove, and/or evidence God, Scripture and/or any contained claim, for God defends Himself and His Word and anything used to defend these things must be elevated above God to do it. *Rather*, believe in God and the truth of His Word by faith and spread the Word to others as truth and trust that the Holy Spirit will work on hearts to miraculously transform them. *Rather*, warn people of the wiles (and dominance) of Satan in our current intellectual and academic arenas.
- E) claiming that it takes more faith to believe in evolution than creation, when *Biblical* faith is a gift of God and confidence in the word/nature of God over the perceptions/reasoning of man. *Rather* believe and share the truth B that belief in creation is only by divine transformation of the heart.
- F) mischaracterizing evolutionary theory B *i.e.* burning evolutionary strawmen. *Rather* (if a critique of evolutionary theory is found appropriate) uphold truth, not error.
- G) claiming or implying that we have all (or even many) of the answers and/or that the intellectual world is safe for believers and/or creationists. The large number of spiritual fatalities in college suggests this is claim is wrong and we must remember that we must give account for all those we cause to stumble.
- H) using outdated creation arguments B such as the following:

a) Claim: Evolution is Not Science

Summary of Claim: Science only studies present, observable, repeatable processes, so *any* study of history B *e.g.* origins, creation or evolution B cannot be science. Advocated by many creationists.

Claim Problems: 1) Most founders of modern science developed science to learn about the Creator by studying His creation; 2) Historical sciences (*e.g.* paleontology, archaeology) are universally accepted as science; 3) Numerous theories (universally accepted as science) concern unobservable & non-repeatable processes; 4) Professional philosophers of science cannot define a line of demarcation between science and non-science.

Counter-Claim Source: Just about any good recent textbook on the philosophy of science will effectively counter this claim. Example of a Christian text: Moreland, J.P., 1989, *Christianity and the Nature of Science*, Baker, Grand Rapids, MI.

More Accurate Claim: Science is a method of understanding the physical world which values correspondence between theories of understanding and physical world data. Science potentially studies anything which affects the physical world including events past and present, observable and unobservable, repeatable and unrepeatable. **Creationism is science as evolutionism is science.**

b) Claim: Moon Dust Indicates a Young Moon

Summary of Claim: The thin (3/8") dust layer on the moon suggests that the moon is only a few thousand years old (apparently beginning with Slusher, Harold S., 1971, Some astronomical evidences for a youthful Solar System, *Creation Research Society Quarterly*, 8(1):55-7)

Claim Problems: 1) Measurements used to estimate the influx rate of extraterrestrial dust were flawed and research was of poor quality; 2) Beneath the surface layer of dust, the Moon has dozens of feet of impact-fused rocks containing a mixture of lunar rock and dust, so there is much more dust than originally thought.

Counter-Claim Source: Snelling, A. A., and D. Rush, 1993, *Creation Ex Nihilo Tech. J.* 7(1):2-42.

More Accurate Claim: Although there is more to learn in the study of lunar dust, apparently **the amount of lunar dust is not a problem** for either old- or young- moon models.

c) Claim: The Speed of Light is Decaying

Summary of Claim: The speed of light was fast enough in the past for billions of light years of distance to be traversed by starlight and for billions of radioactive years to elapse (beginning with Setterfield, Barry, 1981, The velocity of light and the age of the universe, *Creation Ex Nihilo*, 4(1):38-48)

Claim Problems: 1) Speed of light measurements claimed by Setterfield to demonstrate a decrease do not show a statistically significant change; 2) Extrapolation 6000 years into the past from recent measurements have excessive error; 3) No good theoretical basis exists for Setterfield's extrapolation equation; 4) The speed of light affects *so* many other things, there may be unknown problems associated with changing it; 5) There are evidences (*e.g.* pleochroic halos) which seem to suggest no changes have occurred.

Counter-Claim Source: Evered, M. G., 1995, *Creation Ex Nihilo Tech. J.* 9(1):1-2-5 (lists other references).

More Accurate Claim: **There is insufficient evidence to argue for a change in the speed of light.** Other explanations of the starlight problem may be more fruitful.

d) Theory: White Hole Cosmogony (a.k.a. Humphreys' Starlight and Time Theory)

Summary of Claim: While creating astronomical bodies, God rapidly expanded the earth-centered universe, causing billions of years to elapse in deep space during days of earth (Creation Week) time, allowing stars to evolve and for starlight to traverse billions of light years of distance (beginning with Humphreys, D. Russell, 1994, Progress toward a young-earth relativistic cosmology, pp. 267-286 in *Proceedings of the 3<sup>rd</sup> ICC* and popularized by Humphreys, D. Russell, 1994, *Starlight and Time: Solving the Puzzle of Distant Starlight in a Young Universe*, Master Books, Green Forest, AR).

Claim Problems: 1) Although the theory is based on general relativity (GR) theory, creationist and non-creationist GR experts all claim Humphreys (who is not a GR expert) is wrong in his mathematics; 2) The closer the object is to the earth, the less time is affected, leaving many closer objects still too old (tens of thousands of years) to fit Biblical time constraints; 3) The theory does nothing to help explain the billions of years of apparent time which seems to have elapsed on earth, the moon, and the planets.

Counter-Claim Source: Conner, S. R., and D. N. Page, 1998, *Creation Ex Nihilo Tech. J.* 12(2):174-194.

More Accurate Claim: **Young-age creationists need to develop their own cosmogony**, and it will probably require GR experts generating (as Humphreys tried) solutions of GR using alternate assumptions.

e) Claim: Polonium Radiohalos Indicate Granites Were Created in Less than 3 Minutes

Summary of Claim: God created earth granites instantaneously and cold, with microscopic concentrations of radioactive polonium (Po) atoms. The Po subsequently decayed, leaving spheres of radiation damage, called polonium radiohalos or halos, as direct evidence of God's instantaneous creation (beginning with Gentry, Robert V., 1968, Fossil alpha-recoil analysis of certain variant radioactive halos, *Science*, 160:1228-1230).

Claim Problems: 1) Po halos are found in non-granite rocks; 2) Po halos are found in rocks formed in the Flood; 3) All Po halos are found in hydrothermal minerals (minerals which can crystallize from hot water; 4) All photos of Po halos show them to be located on the edge of cracks in minerals (as if the Po was brought there by water); 5) Of the 17 different types of Po which we *could* distinguish if they had every been there, the *only* ones found are the 3 which are in the decay series of uranium and thorium (as if the Po came from the decay of U or Th rather than being directly created); 6) There is evidence that the abundance of Po halos is related to the (U and Th) radioactivity of the rock; 7) Halos and recoil evidences are destroyed at high temperatures.

Counter-Claim Source: Wise, Kurt P., 1989, Radioactive halos: Geological concerns, *Creation Research Society Quarterly*, 25(4):171-6; Snelling, Andrew A., and Mark H. Armitage, 2003, Radiohalos B A tale of three granitic plutons, pp. 243-267 in *Proceedings of the 5<sup>th</sup> ICC*.

More Accurate Claim: **Po halos were the result of very hot water moving through rocks after the creation.** Since high temperatures destroyed halos and other evidences of radioactivity, it was

only in the cooling stage of this process that Po halos are produced.

f) Theory: (Water) Canopy Theory

Summary of Claim: A canopy of water vapor high in the earth's atmosphere generated a uniform, sub-tropical, rain-free, longevity-increasing, pre-Flood environment which, by collapsing, contributed water to the Flood (a variation on Vail's ice ring hypothesis of 1876; popularized by Whitcomb, John C., Jr., and Henry M. Morris, 1961, *The Genesis Flood*, Presyberian & Reformed, Phillipsburg, NJ and repopularized by Dillow, Joseph C., 1981, *The Waters Above*, Moody, Chicago, IL)

Claim Problems: 1) The 'waters above' (Gen. 1:6-7) are above the 'firmament of heaven' where birds fly and the sun, moon, and stars are located (Gen. 1:20, 14-17), so they seem to be beyond the stars, not in the earth's atmosphere; 2) The 'waters above' the heavens are still there in David's day (Psalm 148:4) B they did not fall out in the Flood; 3) The 'mist' of Gen. 2:5-6 probably describe the hydrologic conditions of the early part of Day Six of the Creation Week in the to-be Garden of Eden, rather than all pre-Flood time; 4) According to cognates in sister languages, the Hebrew word translated 'mist' in Gen. 2:5-6 was probably a flowing spring, rather than a heavy dew; 5) It has not been possible to experimentally change the maximum life span of anything by changing physical conditions; 6) Tree rings of fossil trees from Flood sediments suggest the pre-Flood world had different climatic zones, seasons, frosts, and rain; 7) Computer modeling suggests that unless God directly held up the water, the theorized canopy cannot carry more than 5 feet of water, which does not contribute much to the Flood and would fall out in hours, not (40) days; 8) The rainbow probably preceded the Flood just as other covenant symbols preceded the covenants (e.g. circumcision before Abrahamic Covenant; bread and water before Christ's New Covenant).

Counter-Claim Source: Wise, K. P., 1992, *Creation Ex Nihilo Tech. J.* 6(2):168-172 (tree ring evidence).

More Accurate Claim: **A very thin pre-Flood water canopy may have existed, but there is no evidence for it B physical or Biblical.** The pre-Flood world seems to have been a bit warmer than now (warm temperate at the poles?), but had latitudinal climatic zones, seasons, and rain. Humans probably lived longer because of different genetic programming and Flood water was probably displaced from pre-Flood ocean basins.

g) Claim: Hydroplate Theory

Summary of Claim: A pre-Flood Pangaea configuration of continents supported by subterranean oceans rapidly separated by hydroplaning during the Flood (introduced by Walt Brown and popularized in his book *In the Beginning*, the first edition of which was in 1989).

Claim Problems: 1) The postulated subterranean ocean basins (even empty) should show up by seismic reflection, and they do not; 2) The theory requires the western Pacific Ocean floor to be made of granite, but only basalt is found in all >300 ocean cores in the western Pacific; 3) Although the theory claims the >Ice Age= occurred as part of the Flood, the non-lithified, superficial nature of ice age sediments suggests they were formed centuries after the Flood. Evidences explained by conventional plate tectonics but not by this theory: 4) Evidence for pre-Pangaea continental motion (including: Caspian & Appalachian Mountains; pre-Permian polar wandering curves; North American/European Cambrian trilobite distribution); 5) magnetic striping on either side of the mid-ocean ridge; 6) magnetic field reversal evidence in terrestrial and oceanic lavas; and 7) mantle velocity anomalies indicated by seismic tomography.

More Accurate Claim: Catastrophic Plate Tectonics (CPT) Theory (Austin, S.A., J.R. Baumgardner, D.R. Humphreys, A.A. Snelling, L. Vardiman, and K.P. Wise, 1994, Catastrophic plate tectonics: A global flood model of earth history, pp. 609-621 in *Proceedings of the 3<sup>rd</sup> ICC*) suggests the Flood was caused and continents were moved by pre-Flood ocean crust sinking into the mantle at meters per second during the Flood. **CPT theory explains all the evidence explained by both the hydroplate and plate tectonics models and much more data besides.**

h) Claim: Hovind Theory

Summary of Claim: The Flood was caused by the rapid shifting of ice caps and resulting change in earth axis tilt (proposed by Kent Hovind)

Claim Problems: 1) The best inferences available for pre-Flood climate suggest the poles were

temperate (*i.e.* there were no pre-Flood ice caps); 2) The mass of ice caps is many, many times too small to cause a change in the earth's rotation rate and/or tilt; 3) It is not at all evident how such a change in rotational tilt would cause a Flood; 4) Continental Ice Sheet evidences are best explained by events following the Flood by several centuries.

More Accurate Claim: The pre-Flood world seems to have been a bit warmer than the present (temperate at the poles) and without ice caps. The best Flood model available is CPT theory (Austin, S.A., J.R. Baumgardner, D.R. Humphreys, A.A. Snelling, L. Vardiman, and K.P. Wise, 1994, Catastrophic plate tectonics: A global flood model of earth history, pp. 609-621 in *Proceedings of the 3<sup>rd</sup> ICC*). Probably as a consequence of cooling of Flood waters following the Flood, **continental ice accumulated beginning centuries after the Flood.**

i) Claim: Footprints in the Paluxy R., Glen Rose, TX Demonstrate Humans & Dinosaurs Lived Together  
Summary of Claim: In the Glen Rose Limestone near Glen Rose, Texas, footprints of humans and dinosaurs are found together, demonstrating they lived at the same time and place (Carl Baugh and many creationist writers).

Claim Problems: 1) Many of the claimed human footprints are single, poorly defined indentations which could be produced by natural erosion; 2) Some of the claimed human footprints have been shown to be carved (including the Burdick print); 3) The claimed human prints of the >Taylor Trail= (featured in the film *Footprints in Stone*) were ultimately shown to be in the midst of dinosaur prints; 4) It is likely that the claimed Taylor Trail prints are actually made from pads on the foot of a dinosaur; 5) Creationist claims coming from Glen Rose are usually dis-proven rather quickly; 6) There is no explanation as to how both dinosaurs and man were still walking around together atop thousands of feet of sediment already deposited in the Flood.

Counter-Claim Source: Morris, John D., 1986, Identification of ichnofossils in the Glen Rose Limestone, central Texas, pp. 89-91 in *Proceedings of the 1<sup>st</sup> ICC*, Volume 1.

More Accurate Claim: **There is no definitive evidence of humans in any sediments below the Pleistocene**, including the dinosaur-containing sediments.

j) Claim: A Fossil Whale Standing on its Tail Suggests Extremely Rapid Burial

Summary of Claim: A vertically-oriented fossil whale preserved in Lompoc (CA) diatomite requires scores of feet of diatomite to have been deposited quickly (before the whale decayed) (Reese, 1976 and many creationist writers)

Claim Problems: 1) Faulting has tilted the diatomite containing the whale into a vertical position; 2) The whale is not that well preserved (Not very many of its bones are even there).

Counter-Claim Source: Snelling, Andrew A., 1995, The whale fossil in diatomite, Lompoc, California, *Creation Ex Nihilo Tech. J.* 9(2):244-258.

More Accurate Claim: **Although well-preserved fossils in diatomite do suggest rapid diatomite deposition, this particular fossil does not.**

k) Claim: Rapid Deep-Freeze of Mammoths

Summary of Claim: Mammoths were near-instantly frozen by a >200-degree drop in temperature (Joseph Dillow, 1981)

Claim Problems: 1) Most mammoth fossils are skeletons, not frozen bodies; 2) All mammoths except the baby Dima were found in frozen mud (not ice); 3) At the time of each of their discoveries, all large mammoths preserved with flesh seem to have evidence of substantial decomposition.

More Accurate Claim: **Many mammoths seem to have been overwhelmed by some sort of mud catastrophe centuries after the Flood**, and subsequently gradually frozen as the mud was frozen from the surface down.

l) Claim: Japanese Fishermen Caught a Plesiosaur in 1977

Summary of Claim: In 1977 a large, rotten carcass got caught off the New Zealand coast in the nets of Japanese fishermen. The carcass was thrown back, but photos and flesh samples suggest it was a plesiosaur. A postage stamp issued Japan soon thereafter indicated they believed it was a plesiosaur (many creationist writers).

Claim Problems: 1) Samples from the carcass possess protein which matches nearly perfectly the basking shark proteain elastoidin; 2) Because plesiosaur limbs are attached to the ventral skeleton, an eviscerated plesiosaur would be limbless, whereas this eviscerated specimen has appendages; 3) Japanese sharkfin processors identified the carcass as a basking shark; 4) The dimensions of the carcass are larger than the average basking shark, but match the proportions

well. The proportions of plesiosaurs do not match these measurements; 5) Badly decayed shark carcasses are commonly mistaken for sea monsters.

Counter-Claim Source: Jerlström, Pierre G., 1998, Live plesiosaurs: Weighing the evidence, *Creation Ex Nihilo Tech. J.* 12(3):339-346.

More Accurate Claim: **Evidence indicates that it was probably a basking shark.**

IV) **EVALUATION.** Based upon the above, when you are trying to find quality creationist material, follow the following steps:

- A) Check for the philosophy of science advocated (this is usually at the very beginning of the work). If it argues that evolution is not a science and/or that creation is not a science, it is not quality material.
- B) Check the emotional tenor of the work. If it is not respectful of evolutionists, but rather is sarcastic and mocking of evolutionists, it is not quality material.
- C) Check the respect it shows to evolutionary theory. If it portrays evolution as anything other than a powerful, convincing (and thus dangerous) theory, but rather as incredible, unbelievable, and/or silly, then it is not quality material.
- D) Check the focus of the material. If it focuses on the problems with evolutionary theory rather than on what actually happened in earth history, it *might* be a quality critique of evolutionary theory, but it is not quality creationist material.
- E) Glance through the work for any false claims (*e.g.* presents moon dust or speed of light as evidence of a young earth, or polonium halos as evidence of instantaneous creation, or defends the hydroplate or hovind or canopy theories, or presents human and dinosaur prints or a vertical whale or a plesiosaur as evidence). If it makes any of these false claims, it is not quality material.

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## **THE SCIENTIFIC EVIDENCE FOR CREATION**

by Duane T. Gish, Ph.D.

### **The Nature of Theories on Origins**

In order for a theory to qualify as a scientific theory it must be supported by observations that are repeatably observable and the theory must, in principle, be falsifiable. That is, there must be some way to demonstrate that the theory is false if indeed it is false. Neither creation nor evolution fulfils the criteria of a scientific theory. There were no human observers to the origin of the universe, the origin of life, or to the origin of a single living thing. These events occurred in the unobservable past and are not repeatable in the present. Creation and evolution are inferences based on circumstantial evidence. They are theories about history. Stephen Jay Gould, Harvard professor and a leading spokesman for evolutionary theory today, states that "Evolutionary biology is a quintessential historical discipline" and he pays great honor to evolutionist Ernst Mayr as a "great historical scientist."<sup>1</sup>

Is an evolutionary event observable, even repeatably observable? Theodosius Dobzhansky, a famous evolutionist, has said,

Those evolutionary happenings are unique, unrepeatable, and irreversible. It is as impossible to turn a land vertebrate into a fish as it is to effect the reverse transformation. The applicability of the experimental method to the study of such unique historical processes is severely restricted before all else by the time intervals involved, which far exceed the lifetime of any human experimenter. And yet it is just such impossibility that is demanded by anti-evolutionists when they ask for "proofs" of evolution which they would magnanimously accept as satisfactory.<sup>2</sup>

Dobzhansky thus stated that the applicability of the experimental method to evolution is an "impossibility." One reason given by Dobzhansky and other evolutionists for rejecting creation as a possible explanation for origins is because it is not subject to the experimental method. At the same time, however, they consider it wholly unreasonable for creationists to place the same demand on evolution theory!

An example of evolution often taught to students is the change in populations of peppered moths in England from a predominantly light, speckled colored variety to a predominantly melanic, or dark colored variety, due to a

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<sup>1</sup> Stephen J. Gould, *Science* 223 (1984): 255.

<sup>2</sup> Theodosius Dobzhansky: "On Methods of Evolutionary Biology and Anthropology," *American Scientist* 45 (December 1957): 388.

progressive darkening of tree trunks on which the moths rest. This occurred as a result of the increase in pollution due to the industrial revolution. It has been characterized by evolutionists as the most astounding example of evolution ever seen by man. Of course, it is not evolution at all. The moths were peppered moths, *Biston betularia*, before the industrial revolution, and they all remain peppered moths, *Biston betularia*, today. The variations that are actually observable today, and which Darwin cited in this book as evidence for evolution, are changes within a species. No one has ever observed one basic kind of plant or animal naturally change into another basic kind. Is evolution theory falsifiable? The theory has become so plastic that no matter what the data are, they can be made to fit the theory. More and more evolutionists are becoming aware of this flaw in modern evolution theorizing. For example, evolutionist Murray Eden, an MIT professor, has stated,

This cannot *be done in evolution*, taking it in its broad sense, and this is really all I meant when I called it *tautologous* in the first place. *It can, indeed, explain anything*. You may be ingenious or not in proposing a mechanism which looks plausible to human beings and mechanisms which are consistent with other mechanisms which you have discovered, but it is still an unfalsifiable theory.<sup>3</sup> [emphasis added]

Thus evolution, that is, the amoeba-to-man theory, cannot be observed and the theory is non-falsifiable. It thus fails to satisfy the criteria of a scientific theory. The same can be said of creation theory. We do not see God creating anything today, and as a theory, creation is non-falsifiable. Nevertheless, one or the other must be true. Furthermore, each can be used as a scientific model and discussed in scientific terms. We do have circumstantial evidence against which each theory can be compared—the fossil record, the laws of thermodynamics, the laws of probability, evidence of design and purpose, etc. After that is done then, the question can be asked, “Which model of origins, creation or evolution, do the data fit best?”

But, isn't creation religion? Isn't it true that the supernatural must be excluded from science? On the other hand, isn't evolution, since it excludes the supernatural, at least qualified as a scientific model? It is true that in experimental, observational science in which we are investigating objects, events, and processes in the real world—how the sun produces its energy, the mechanics of the solar system, the cause and products of supernovae explosions, our biochemistry, physiology, etc.—we employ only natural laws and processes? This is the only way a scientist can operate when he seeks to observe and explain the *operation* of the present universe. The evolutionist, however, insists that we must not only use natural laws and processes to explain the *operation* of the universe and its living organisms, but that we must use those same natural laws and processes to explain the *origin* of the universe and the living organisms it contains. In doing so, he steps outside the limits of empirical, observational, testable science. He is insisting on the strict application of his worldview. Richard Lewontin, evolutionist and Harvard professor of biology, in his Introduction to the anti-creationist book, *Scientists Confront Creationism*, states that,

Yet, whatever our understanding of the social struggle that gives rise to creationism, whatever the desire to reconcile science and religion may be, there is no escape from the fundamental contradiction between evolution and creationism. They are irreconcilable world views.<sup>4</sup>

Thus, Lewontin states that evolution and creation are irreconcilable *world views*. One's world view involves one's sense of reality—what lies beyond or prior to the physical universe—Is there something supernatural or transcendental beyond the physical universe, or is there nothing? Is the possibility or conviction that a creator exists more religious than the belief that no creator exists? Both views are metaphysical, thus basically religious. This has been emphasized by Phillip Johnson, University of California professor of law, in his book, *Darwin on Trial*.<sup>5</sup>

Evolutionist Douglas Futuyma states,

By coupling undirected, purposeless variation to the blind, uncaring process of natural selection, Darwin made theological or spiritual explanations of the life processes superfluous. Together with Marx's materialistic theory of history and society and Freud's attribution of human behavior to influences over which we have little control, Darwin's theory of evolution was a crucial plank in the platform of mechanism and materialism—of much of science, in short—that has since been the stage of most Western thought.<sup>6</sup>

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3 M. Eden, in *Mathematical Challenges to the Neo-Darwinian Interpretation of Evolution*, ed. P. S. Moorhead and M. M. Kaplan, (Philadelphia: Wistar Institute Press, 1967), p. 71.

4 Laurie R. Godfrey, ed., *Scientists Confront Creationism* (New York: W. W. Norton and Co., 1983), p. xxvi.

5 Phillip E. Johnson, *Darwin on Trial*, 2<sup>nd</sup> ed. (Downer's Grove, Illinois: Intervarsity Press, 1993).

6 D. J. Futuyma, *Evolutionary Biology*, 2<sup>nd</sup> ed. (Sunderland, MA: Sinauer Associates, Inc., 1986), p. 2.

In other words, the trilogy of Darwinian evolution—Marx’s materialistic theory of economic and political history, and Freudian psychology—is now the predominant mechanistic materialistic world view in Western academia.

Michael Ruse, an evolutionist and a philosopher of science professor at Guelph University, was one of the main witnesses for evolution in the 1981 Arkansas federal trial concerning the constitutionality of the equal time law for creation and evolution passed by the Arkansas legislature (declared unconstitutional by Judge William Overton). At that time he argued strenuously that evolutionary theory was science free of any religious implications while creation theory was exclusively religious. This served as the main basis for Judge Overton’s decision. Twelve years later, Ruse was one of the speakers at the February 13, 1993, symposium on “The New Antievolutionism” of the American Association for the Advancement of Science annual meeting in Boston. His speech, revealing a very significant change in his previous position, stunned the audience. Contributing to this change was an exchange between evolutionists and creationists, involving, among others, Ruse and Phillip Johnson. Ruse made clear that he was still as much an evolutionist as ever. Concerning the exchange with Johnson and others, Ruse stated,

But we did talk much more about the whole question of metaphysics, the whole question of philosophical bases. And what Johnson was arguing was that, at a certain level, the kind of position of a person like myself, an evolutionist, is metaphysically based at some level, just as much as the kind of position of let us say somebody, some creationist, someone like Gish or somebody like that. And to a certain extent, I must confess, in the ten years since I performed, or I appeared, in the creationism trial in Arkansas, I must say that I’ve been coming to this kind of position myself.<sup>7</sup>

Later he stated:

And certainly, there’s no doubt about it, that in the past, and I think also in the present, for many evolutionists, evolution has functioned as something with elements which are, let us say, akin to being a secular religion.

He referred to examples from T. H. Huxley, Julian Huxley, and Edward O. Wilson. In his closing remark, Ruse stated,

But I am coming here and saying, I think that philosophically one should be sensitive to what I think history shows, namely, that . . . evolution, akin to religion, involves making certain *a priori* or metaphysical assumptions, which at some level cannot be proven empirically. I guess we all knew that, but I think that we’re all much more sensitive to these facts now. And I think that the way to deal with creationism, but the way to deal with evolution also, is not to deny these facts, but to recognize them, and to see where we can go, as we move on from there.

About seven years later, in an article published in the *National Post*, a Canadian newspaper, May 13, 2000, page B-1, Ruse, although still a Darwinian evolutionist, revealed his complete turnabout on the question of evolutionary theory and religion. Ruse flatly stated that he now believes that “Evolution is promoted by its practioners as more than mere science. Evolution is promulgated as an ideology, a secular religion—a full-fledged alternative to Christianity, with meaning and morality... **Evolution is a religion**” (emphasis added).

Ruse should be commended for this forthright admission.

The religious nature of evolution had been made clear earlier by such proponents as Julian Huxley and Jacob Bronowski. They have said, for example:

A religion is essentially an attitude to the world as a whole. Thus evolution, for example, may prove as powerful a principle to coordinate man’s beliefs and hopes as God was in the past.<sup>8</sup>

The Jesuit priest, Fr. Pierre Teilhard de Chardin, well known for his involvement with Piltdown Man (the latest research indicates he was not involved with the fraud) and Peking Man fossils, stated that,

Is evolution a theory, a system or a hypothesis? It is much more: it is a general condition to which all theories, all hypotheses, all systems must bow and which they must satisfy henceforward if they are to be thinkable and true. Evolution is a light illuminating all facts, a curve that all lines must follow.<sup>9</sup>

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<sup>7</sup> Transcript of the speech by Dr. Michael Ruse, at the symposium, “The New Antievolutionism,” held at the 1993 AAAS Annual Meeting, Saturday, February 13, 1993, Boston.

<sup>8</sup> Julian Huxley and J. Bronowski, *Growth of Ideas* (Englewood Cliffs: Prentice-Hall, Inc., 1968), p. 99.

Nothing could be more religious than this. But, you might say, Teilhard de Chardin was a priest, not a leading evolutionary scientist. But in his eulogy to Theodosius Dobzhansky, evolutionary biologist Francisco Ayala stated that according to Dobzhansky the place of biological evolution in human thought was best expressed in the passage by Pierre Teilhard de Chardin quoted above.<sup>10</sup> George Gaylord Simpson, world-famous evolutionary paleontologist, also quoted favorably this statement by de Chardin.<sup>11</sup>

Nevertheless, does the teaching of the non-theistic mechanistic theory of evolution constitute a challenge or threat to traditional theistic religious commitments? The Harvard professor, Richard Lewontin, certainly believes so. In his Introduction to *Scientists Confront Creationism* (ref. 4), Lewontin states (p. xxv),

Suddenly the study of evolution was in all the schools. The culture of the dominant class had triumphed, and traditional religious values, the only vestige of control that rural people had over their own lives and the lives of their families, had been taken from them.<sup>12</sup>

This is what occurred, according to Lewontin, following the widespread adoption of the Biological Sciences Curriculum Study series of high school biology books, which are evolutionary throughout. Note particularly that Lewontin states that this constituted a triumph of the *culture* of the dominant class over *traditional religious values* of the rural people. When students are taught that everything in the universe was produced by a series of strictly mechanistic processes starting with the hydrogen and helium gases produced by a hypothetical big bang, this does encourage a belief in a no-God philosophy and set of values.

In conclusion, it can be stated that neither creation nor evolution is a scientific theory and thus evolutionary theory is no more scientific than creation theory. Furthermore, evolution theory is just as religious as creation theory. The teaching of the theory of evolution exclusively, as is being done in most of our tax-supported public schools in the United States, violates the separation of church and state and violates the academic freedom of teachers and students. It is recommended that all of the scientific evidence supporting each of these two opposing theories, devoid of references to, or use of, any religious literature, be presented in our tax-supported public schools in an unbiased manner, allowing the students to decide for themselves which model of origins, creation or evolution, do the data fit best. That would be good science and good education. This can be done fully in accord with the U.S. constitution, even according to leading evolutionists, as thoroughly documented in my book, *Teaching Creation Science in Public Schools* (see Bibliography). The truth is, evolutionists nearly completely dominate our educational system, the scientific establishment with its control of what is published in its journals, and the mass media with its control over what is published in our newspapers and magazines and what goes out over radio and television. It is extremely difficult for creation scientists to obtain a hearing for their position. The results are predictable. Thus, Stephen Jay Gould frankly admitted this when he said:

Many advantages accrue to the victors of any dispute, military or cerebral—and chronicling rights must rank among the greatest of perks. In short, the winners write history. How would we interpret the Trojan War if our main account had been written by Hector's bard; and how would future generations view the history of evolutionary theory if Duane Gish and Henry Morris (our most vociferous modern creationists) cornered the market for written descriptions?<sup>13</sup>

## Summary of the Scientific Evidence

### The Fossil Record

The fossil record constitutes some of the most important evidence concerning origins. It is the history of life written in the rocks. If evolution theory is true, the fossil record must be what this theory requires, and on the other hand, if creation is true, the fossil record must be in accord with that theory. Evolutionists Glenister and Witzke state that "The fossil record affords an opportunity to choose between evolutionary and creationist models for the origin of the earth and its life forms."<sup>14</sup> Futuyama expresses a similar belief when he said,

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9 Pierre Teilhard de Chardin, *The Phenomenon of Man* (New York: Harper and Row, 1965), p. 219.

10 F. J. Ayala, *Journal of Heredity* 68 (1977): 3-10.

11 George G. Simpson, *This View of Life* (New York: Harcourt, Brace and World, Inc., 1964), p. 225.

12 Richard Lewontin, *Scientists Confront Creationism*, ed. Laurie Godfrey, (New York: W. W. Norton & Co., 1983).

13 S. J. Gould, *Natural History* (November 1995), p. 12.

14 B. F. Glenister and B. J. Witzke, in *Did the Devil Make Darwin Do It?* Ed. D. B. Wilson, (Ames: Iowa State University Press, 1983), p. 58.

Creation and evolution, between them, exhaust the possible explanations for the origin of living things. Organisms either appeared on the earth fully developed or they did not. If they did not they must have developed from preexisting species by some process of modification. If they did appear in fully formed state, they must have been created by some omnipotent intelligence. . . .15

If evolution is true, then millions of species have evolved during hundreds of millions of years as each species developed from some preceding form and in turn gave rise to a succeeding form. Furthermore, evolutionary doctrine holds that evolution proceeds by the survival of the fittest, and the fittest are defined as those that reproduce in larger numbers. Thus, the population of each intermediate species would be considerably large and would exist for tens of thousands to several millions of years. As a result, enormous quantities of the transitional forms generated by evolution would have lived and died during that vast stretch of time. If evolution is true, our natural history museums should contain large quantities of undoubted transitional forms. The evidence for evolution should be obvious, even for the untrained eye to see.

On the other hand, if creation were true, we would expect to find a very different kind of record among the fossils. We would expect to observe that each basic kind of plant and animal, each basic morphological design, would appear fully formed with no series of transitional forms revealing an origin from some other basic type. Cats were always cats, dogs were always dogs, monkeys were always monkeys, and humans were always humans. We would expect to see variation within each kind—many varieties of finches, as Darwin noted in the Galapagos Islands. Nevertheless, as creation scientists point out, the finches are not only still birds, they are still finches, and interbreed with one another. To believe that finches, canaries, ducks, eagles, hummingbirds, etc., evolved from a common ancestor which evolved from a reptile requires a great leap of faith not documented by the fossil record. From the very beginning, the fossil record contradicts evolution but presents the evidence predicted based on creation. Darwin was aware of the fact that the fossil record did not produce the evidence his theory predicted, but he hoped future generations would unearth the required evidence. This has not happened. Evolutionist Dr. David Raup, professor of geology at the University of Chicago, states,

The evidence we find in the geologic record is not nearly as compatible with darwnian natural selection as we would like it to be. Darwin was completely aware of this. He was embarrassed by the fossil record because it didn't look the way he predicted it would and, as a result, he devoted a long section of his *Origin of Species* to an attempt to explain and rationalize the differences. . . . Darwin's general solution to the incompatibility of fossil evidence and his theory was to say that the fossil record is a very incomplete one. . . . Well, we are now about 120 years after Darwin and the knowledge of the fossil record has been greatly expanded. We now have a quarter of a million fossil species but the situation hasn't changed much. The record of evolution is still surprisingly jerky and, ironically, we have even fewer examples of evolutionary transition than we had in Darwin's time. By this I mean that some of the classic cases of darwinian change in the fossil record, such as the evolution of the horse in North America, have had to be discarded or modified as a result of more detailed information—what appeared to be a nice simple progression when relatively few data were available now appears to be much more complex and much less gradualistic. So Darwin's problem has not been alleviated. . . .16

Earlier, evolutionist David Kitts, professor of geology at the University of Oklahoma, expressed the same view.

Despite the bright promise that paleontology provides a means of "seeing" evolution, it has presented some nasty difficulties for evolutionists the most notorious of which is the present of "gaps" in the fossil record. Evolution requires intermediate forms between species and paleontology does not provide them. The gaps must therefore be a contingent feature of the record. Darwin was concerned enough about this problem to devote a chapter of the "Origin" to it. He accounts for "the imperfections of the geological record" largely on the basis of the lack of continuous deposition of sediments and by erosion. Darwin also holds out the hope that some of the gaps would be filled as the result of subsequent collecting. But most of the gaps were still there a century later and some paleontologists were no longer willing to explain them away geologically.17

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15 D. J. Futuyma, *Science on Trial* (New York: Pantheon Books (1983), p. 197.

16 D. M. Raup, *Field Museum of Natural History Bulletin* 50 (1979): 22.

17 David Kitts, *Evolution* 28 (1974): 467.

As we will see, just as paleontological research during the 125 years between publication of Darwin's book and these publications failed to alleviate Darwin's problem with the fossil record, neither has paleontologists improved the situation in the two decades since publication of these reports.

The fossils of a vast array of complex invertebrates abruptly appear fully formed in the so-called Cambrian rocks. Evolutionists believed a few years ago that these Cambrian rocks began to form about 600 million years ago. Now geologists are telling us that these rocks began to form no more than 520-530 million years ago, and that the duration of what is called the Cambrian period was only about 5-10 million years rather than their earlier estimate of 80 million years. These fossils include those of clams, snails, trilobites, brachiopods, jellyfish, sponges, worms, etc. Billions times billions of fossils of these creatures are found in Cambrian rocks on every continent of the world. These animals supposedly evolved beginning with microscopic, single-celled creatures. Lying generally underneath the Cambrian rocks are what are called Precambrian rocks. Evolutionists believe Precambrian rocks were laid down during hundreds of millions of years preceding and leading up to the Cambrian Period. If evolution is true, these Precambrian rocks should contain billions times billions of fossils of the evolutionary ancestors of the complex invertebrates. Furthermore, we must find fossils of transitional forms linking these complex invertebrates to common ancestors. Many of the Precambrian rocks are undisturbed and perfectly suitable for the preservation of fossils. If the fossils were there, they would be found. There are now many reports in the scientific literature of the discovery of fossils of microscopic, soft-bodied, single-celled organisms, such as bacteria and algae, in Precambrian rocks. If fossils of such creatures can be found it is obvious that there would be no difficulty in finding fossils of the evolutionary ancestors and transitional forms leading up to the complex invertebrates whose fossils are found in Cambrian rocks. No one, however, has found fossilized ancestors for a single one of the Cambrian invertebrates, or transitional forms linking, say, sponges with jellyfish, brachiopods with clams, snails with trilobites, or any other possible linkages. Because of the vital importance of these facts, extensive documentation will be provided. The following references describe the many recent publications that discuss the pervasive, perplexing, and persistent problem for evolutionary theory due to the explosive appearance of a vast array of complex invertebrates in the fossil record with a total absence of ancestors and no trace of transitional forms between the various kinds of invertebrates. Richard Dawkins, the British biologist and evolutionist, states:

The Cambrian strata of rocks, vintage about 600 million years, are the oldest in which we find most of the major invertebrate groups. And we find many of them already in an advanced state of evolution, the very first time they appear. It is as though they were just planted there, without any evolutionary history. Needless to say, this appearance of sudden planting has delighted creationists.<sup>18</sup>

Yes, indeed! The sudden appearance of these creatures fully formed does delight creationists. It is precisely what is predicted based on creation. Douglas Futuyma, ardent anti-creationist, in his book on evolutionary biology, states:

It is considered likely that all the animal phyla became distinct before or during the Cambrian, for they all appear fully formed, without intermediates connecting one form to another.<sup>19</sup>

Thus, Futuyma must confess that *all* the animal phyla (a phylum is the broadest category or taxon of plants and animals; for example, all vertebrates—fish, amphibia, reptiles, birds and mammals, including man—are placed in the phylum Chordata), or at least all the invertebrate phyla, have appeared in the fossil record with absolutely no evidence that they arose from preceding forms.

James W. Valentine, geologist-paleontologist at the University of California, Santa Barbara, describes the problem this way:

Most authorities do agree that metazoan phyla more complex than flatworms have all (or perhaps nearly all) descended at least indirectly from flatworm-like stocks, since they all share many features. However, there is no agreement on the actual pathways of descent; nearly every remotely possible ancestral-descendant combination has been suggested by one or another worker. Again, the nature of forms intermediate between known groups will obviously have been different for one ancestor-descendant pair than for another.

The fossil record is of little use in providing direct evidence of the pathways of descent of the phyla or of invertebrate classes. Each phylum with a fossil record had already evolved its characteristic body plan when it first appeared, so far as we can tell from the fossil remains, and no phylum is connected to any other via intermediate fossil types. Indeed, none of the invertebrate classes

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<sup>18</sup> Richard Dawkins, *The Blind Watchmaker* (New York: W. W. Norton, 1987), p. 229.

<sup>19</sup> Douglas Futuyma, *Evolutionary Biology*, 2<sup>nd</sup> ed. (Sunderland, Massachusetts: Sinauer Associates, Inc., 1986), p. 325.

can be connected with another class by series of intermediates. The relationships among phyla and classes must be inferred on the basis of their resemblance. However, even the most sophisticated techniques of phylogeny analysis have thus far failed to resolve the great differences of opinion concerning the relationships among phyla (or among many classes as well).<sup>20</sup>

The many invertebrate phyla such as clams, snails, brachiopods, sea urchins, sponges, jellyfish, trilobites, etc., differ drastically from one another, yet evolutionists believe, as Valentine describes, that all of them have evolved from the same common ancestor—a flatworm-like creature! This is based purely on faith, of course, for as Valentine describes later in the same article, those creatures that developed skeletonized structures (those creatures with hard parts, such as clams, snails, trilobites, corals, etc.) did so independently and without leaving any traces of ancestors or transitional forms. He says:

Each of the phyla that developed durably skeletonized lineages during this period did so independently, suggesting that the opportunities for epifaunal life were open to a wide array of adaptive types. Furthermore, many of the durably skeletonized phyla appearing in Cambrian rocks are represented by a number of distinctive subgroups, classes, or orders, that appear suddenly without known intermediates.<sup>21</sup>

Taking into account the number of phyla, and the number of classes within each phylum that appear in Cambrian rocks, Valentine estimates that about 300 creatures with different major body plans and subplans are found in these rocks. Billions times billions of fossils of these creatures are entombed in the Cambrian rocks scattered on the face of the earth. These rocks, and the Precambrian rocks, should contain many billions of fossils of the vast number of intermediates that would have existed if evolution is true, yet not one has ever been found!

As more and more discoveries are made, evolutionists are getting squeezed increasingly. They used to date the beginning of the Cambrian period at about 600 million years, and assumed that its duration was about 80 million years. Now they are assigning a date of about 530 million years, and possibly as recently as 520 million years, for its beginning, and are being forced to squeeze the origin of the vast array of complex invertebrates into a time span which they believe may encompass no more than ten million years and most likely only five million years. Five million years is just a blink of time on their evolutionary time scale. After all, they believe that single-celled organisms existed on the earth for three billion years before these Cambrian animals emerged from nowhere.

One of the most thorough discussions of all aspects of the “Cambrian explosion” and its attendant “mysteries” is found in Chapter 1, “Origin and Early Radiation of the Metazoa,” authored by paleontologists Philip Signor and Jere Lipps in the book edited by the same authors.<sup>22</sup> They begin their account with the statement:

The complex of historical events encompassing the origin and early evolution of Metazoa is at once the salient feature and the most unresolved bio-historical phenomenon in the history of life. It has been the single most perplexing issue since paleontology emerged as a scientific discipline in the eighteenth and nineteenth centuries.

They report that:

The sudden appearance of diverse metazoan skeletal fossils heralds the beginning of the Phanerozoic [the Phanerozoic Age includes all of the fossil record from the Cambrian to the present] . . . there is little evidence that the capacity to form skeletons was acquired gradually or over a prolonged period. . . . A wide variety of skeleton types and most of the major marine invertebrate clades appear suddenly in the fossil record. . . . The ecological diversification of animals is equally dramatic. A wide variety of habitats were occupied by these biotas, from shallow to deep benthos and to the pelagic realm (pp. 7, 8).

Stefan Bengtson, a Swedish paleontologist, describes the situation in the following way:

If any event in life’s history resembles man’s creation myths, it is this sudden diversification of marine life when multicellular organisms took over as the dominant actors in ecology and evolution. Baffling (and embarrassing) to Darwin, this event still dazzles us and stands as a major biological

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20 J. W. Valentine, “The Evolution of Complex Animals,” in *What Darwin Began*, ed. Laurie Godfrey (Boston: Allyn and Bacon, 1985), p. 263.

21 *Ibid.*, p. 267.

22 J. H. Lipps and P. W. Signor, eds., *Origin and Early Evolution of the Metazoa* (New York: Plenum Press, 1992), pp. 3-23.

revolution on a par with the invention of self-replication and the origin of the eukariotic cell. The animal phyla emerged out of the Precambrian mists with most of the attributes of their modern descendants.<sup>23</sup>

Yes, indeed, this sudden appearance of complex invertebrates “out of the Precambrian mist” without a trace of ancestors or transitional forms is still baffling and embarrassing to evolutionists today, just as it was to Darwin, because 135 years after Darwin evolutionists are no nearer to a solution of the “mystery” than was Darwin. Bengtson tells us that “If any event in life’s history resembles man’s creation myths, it is this sudden diversification of marine life. . . .” Again, we say, yes, indeed! The explosion of complex living organisms found in the fossil record is precisely what is and must be predicted based on creation. The myth is not creation. The myth is the theory of evolution, a myth invented to explain our origin without God.

These facts essentially destroy the theory of evolution. The notion that this vast array of complex invertebrates could have evolved during millions of years without leaving a trace of this incredible transition in the fossil record defies any credible explanation. All attempts to appeal to geological, climatic, atmospheric, and chemical explanations for this sudden and dramatic appearance of the complex invertebrates fail miserably. In spite of this irrefutable evidence, if one chooses to believe that evolution is true and all of these complex creatures evolved without leaving evidence, that is his choice, but that person must admit that he believes in evolution not *because* of the scientific evidence but *in spite of* the evidence. On the other hand, the evidence described above is powerful, *positive* evidence for creation. It is precisely what one would expect to find if creation is true.

The origin of the vertebrates is equally sudden and dramatic. Evolutionists believe fishes were the first vertebrates. We have billions times billions of fossils of the complex invertebrates. There are untold billions of fossils of the various kinds of fishes entombed in rocks all around the world. If evolution is true and some invertebrate or invertebrates evolved into fishes during a hundred million years or so, billions times billions of transitional forms should have lived and died during that vast stretch of time. Our natural history museums should have many thousands of fossils of these transitional forms showing which invertebrate evolved into fishes and the pathway of that remarkable evolutionary transition. None have been found.

Errol White, an evolutionist and expert on fishes, in his presidential address on lungfishes to the Linnean Society of London, said:

But whatever ideas authorities may have on the subject, the lungfishes, like every other major group of fishes that I know, have their origins firmly based in nothing. . . .<sup>24</sup>

In his discussion concerning the origin of bony fishes, Todd makes the following remark:

All three subdivisions of the bony fishes appear in the fossil record at approximately the same time. They are already widely divergent morphologically, and they are heavily armored. How did they originate? What allowed them to diverge so widely? How did they all come to have heavy armor? And why is there no trace of earlier intermediate forms?<sup>25</sup>

Todd attempts to describe a scenario for this sudden appearance, fully formed, of these major kinds of fishes, but it is only that—a scenario. The fact remains, they all appear fully formed.

Arthur Strahler has published an anti-creationist book. In this book, he critiques two of my earlier books on the fossil record. The latest edition, *Evolution: The Fossils Still Say No!* (see Bibliography), was published subsequent to his book. In his discussion of the origin of fishes, Strahler says, “Origin of the vertebrates is obscure—there is no fossil record preceding the occurrence of fishes in the late Ordovician time.”<sup>26</sup> This is what he has to say concerning ancestors and transitional forms for fishes:

Duane Gish finds from reading Alfred S. Romer’s 1966 treatise, *Vertebrate Paleontology*, that mainstream paleontologists have found no fossil record of transitional chordates leading up to the appearance of the first class of fishes, the Agnatha, or of transitional forms between the primitive, jawless agnaths and the jaw-bearing class Placodermi, or of transition from the placoderms (which were poorly structured for swimming) to the class Chondrichthyes, or from those cartilaginous-skeleton sharklike fishes to the class Osteichthyes, or bony fishes (1978a, pp. 66-70; 1985, pp. 65-69).

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<sup>23</sup> Stefan Bengtson, *Nature* 345 (1990): 765.

<sup>24</sup> E. White, *Proceedings of the Linnean Society of London* 177 (1996): 8.

<sup>25</sup> G. T. Todd, *American Zoology* 20 (4, 1980): 757.

<sup>26</sup> A. N. Strahler, *Science and Earth History—The Evolution/Creation Controversy* (Buffalo: Prometheus Books, 1987), p. 316.

The evolution of these classes is shown in Figure 43.1. Neither, says Gish, is there any record of transitional forms leading to the rise of the lungfishes and the crossopterygians from the lobe-finned bony fishes, an evolutionary step that is supposed to have led to the rise of amphibians and ultimately to the conquest of the lands by air-breathing vertebrates.

In a series of quotations from Romer (1966), Gish finds all the confessions he needs from the evolutionists that each of these classes appears suddenly and with no trace of ancestors. The absence of the transitional fossils in the gaps between each group of fishes and its ancestor is repeated in standard treatises on vertebrate evolution. Even Christ McGowan's 1984 anticreationist work, purporting to show "why the creationists are wrong," makes no mention of Gish's four pages of text on the origin of the fish classes. Knowing that McGowan is an authority on vertebrate paleontology, keen on faulting the creationists at every opportunity, I must assume that I haven't missed anything important in this area. This is one count in the creationists' charge that can only evoke in unison from the paleontologists a plea of *nolo contendere* (p. 408).

*Nolo contendere* is, of course, a guilty plea by a defendant who must admit that he has no defense.

The fossil record has thus not produced ancestors or transitional forms for the major fish classes. Such hypothetical ancestors and the required transitional forms must, based on the known record, be merely the products of speculation. How then can it be argued that the explanation offered by the evolution model to explain such evidence is more scientific than that of the creation model? In fact, the evidence *required* by evolution theory cannot be found. The evidence, on the other hand, is precisely what would be expected if creation is true.

As far as the evidence is concerned, the matter is settled. Evolution of living organisms did not take place on this planet. Endless arguments are generated by the question, Is *Archaeopteryx* a transitional form between reptiles and birds or not? or by the question, Is one of the australopithecines transitional between apes and humans or is it not? Even evolutionists argue among themselves on questions such as these. In the case of the origin of the Cambrian complex invertebrates and the origin of fishes, the evidence is crystal clear. There is not a shred of evidence to support the notion that these creatures evolved. On the other hand, the abrupt appearance, fully formed, of all of these creatures is exactly the evidence demanded by creation.

The remainder of the fossil record provides powerful support for creation. Each basic type of plant and animal is set apart with no series of transitional forms linking it to another basic type. Even though the following quotes from the publications of George Gaylord Simpson are now more than 50 years old, they still describe eloquently the present situation. In a section entitled "Major Systematic Discontinuities of Record" in one of his books he states that nowhere in the world is there any trace of a fossil that would close the considerable gap between *Hyrocotherium*, supposedly the first "horse," and its suggested ancestral order Condylarthra. He then goes on to say:

This is true of all thirty-two orders of mammals. . . . The earliest and most primitive known members of every order already have the basic ordinal characters, and in no case is an approximately continuous sequence from one order to another known. In most cases the break is so sharp and the gap so large that the origin of the order is speculative and much disputed.<sup>27</sup>

Later on (p. 107), Simpson states:

This regular absence of transitional forms is not confined to mammals, but is an almost universal phenomenon, as has long been noted by paleontologists. It is true of almost all orders of all classes of animals, both vertebrate and invertebrate. *A fortiori*, it is also true of the classes, and of the major animal phyla, and it is apparently also true of analogous categories of plants.

Take flying animals, for example. No one has found a trace of an ancestor or transitional forms for the flying reptiles, now extinct. Each one appears fully formed. Evolutionist Robert Bakker states:

Reconstructing the ancestry of a clan like the pterodactyls remains an especially difficult challenge. Flying dragons seem to burst into the world like Athena from the mind of Zeus, fully formed. Even the earliest skeletons of pterodactyls already display fully developed wings and the specialized torso and hips so characteristic of the entire order. . . . As of today, no fossils have been discovered to show how the pterodactyl's forelimbs became transformed into wings.<sup>28</sup>

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<sup>27</sup> George G. Simpson, *Tempo and Mode in Evolution* (New York: Columbia University Press, 1944), p. 105.

<sup>28</sup> Robert T. Bakker, *the Dinosaur Heresies* (New York: Zebra Books, Kensington Publishing Corp., 1986) pp. 296-297.

Supposedly millions of years passed during which some land animal gradually evolved into these amazing flying creatures, but not a single transitional form has been found!

What about the marine reptiles? These were creatures that were thoroughly reptilian, yet they lived in the sea, most employing paddles for swimming. Supposedly, feet and legs gradually evolved into paddles. The *Ichthyosaur*, quite different, externally was very fishlike in appearance. If evolution were true, surely the fossil record would produce at least a few transitional forms showing some land reptile gradually evolving into this remarkable creature. However, Colbert and Morales state:

The ichthyosaurs, in many respects the most highly specialized of the marine reptiles, appeared in early Triassic times. Their advent into the geologic history of the reptiles was sudden and dramatic; there are no clues in pre-Triassic sediments as to the possible ancestors of the ichthyosaurs.<sup>29</sup>

The abrupt appearance of these creatures without a trace of transitional forms is again powerful positive evidence for creation.

The origin of other flying animals in addition to the pterodactyls is further evidence for creation. Fossils of the flying mammals, or bats, appear abruptly in the fossil record, essentially identical to modern day bats, including possession of the sonar system found in many modern bats. There are no traces of ancestors or transitional forms. The flying insects appear in the fossil record without a single transitional form to suggest that something on a non-flying insect evolved into wings. James Marden has recorded the fact that

Certain modern species are reasonably similar to fossils of winged insects dating back 325 million years. The problem is, wings appear in the fossil record already fully formed.

So miraculous a thing is insect flight that nearly all insect biologists believe it could have evolved only once.<sup>30</sup>

According to evolutionists, evolution is not a miraculous process but totally naturalistic, but apparently there must be many exceptions, and miracles can be invoked when necessary to save their theory.

*Archaeopteryx* is the fossil bird that is the favorite of evolutionists who claim that there are some examples of transitional forms. It is claimed that *Archaeopteryx* existed about 140 million years ago and had features suggesting it was intermediate between birds and reptiles. There is no question that *Archaeopteryx* was a flying bird. It had the form and pattern of the avian wing, its feathers were identical to those of modern flying birds, it had perching feet, a bird-like skull, and the furcula, or wishbone, of modern birds. Whatever features it had, whether one wishes to call them bird-like or reptile-like, they were completely formed, not in a state of transition. Ornithologist Alan Feduccia states:

*Archaeopteryx* probably cannot tell us much about the early origins of feathers and flight in true protobirds because *Archaeopteryx* was, in a modern sense, a bird.<sup>31</sup>

It has been claimed that feathers developed from frayed-out scales of reptiles. This is a notion that is directly contradicted by the scientific evidence. The structure and development of feathers are completely different from reptilian scales. Bush states:

It has been a truism for most of this century that feathers are related to reptilian scales. But, the molecular evidence questions the simple, direct relation of the specialized structure of the birds to reptile scales. I will provide arguments to show that reptile scales and feathers are related only by the fact that their origin is in epidermal tissue. Every feature from gene structure and organization to development, morphogenesis, and tissue organization is different.<sup>32</sup>

Feathers appear suddenly in the fossil record, Bush observes.

A frequent claim by evolutionists is that birds evolved from dinosaurs. Feduccia and ornithologist Larry Martin, head of vertebrate paleontology at University of Kansas, reject this notion. Martin says:

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29 E. H. Colbert and M. Morales, *Evolution of the Vertebrates* (New York: John Wiley and Sons, 1991), p. 193.

30 James H. Marden, *the Sciences* (November/December 1995), pp. 26-30.

31 Alan Feduccia, *Science* 259 (1993): 792.

32 A. H. Bush, "On the Origin of Feathers," *Journal of Evolutionary Biology* 9 (1996): 132.

The theory linking dinosaurs to birds is a pleasant fantasy that some scientists like because it provides a direct entry into a past that we otherwise can only guess about. But unless more convincing evidence is uncovered, we must reject it and move forward to the next better idea.<sup>33</sup>

The origin of flight in flying insects, flying reptiles, flying mammals, and birds is a remarkable testimony to the fact of creation. The remainder of the fossil record is similarly solid evidence for creation. Evolutionists are forced to substitute scenarios in place of the required transitional forms. On the other hand, the systematic absence of transitional forms, added to the undoubted total absence of ancestors and transitional forms for the complex invertebrates and fishes, is the evidence expected on the basis of creation.

Concerning the origin of man, we are regularly exposed to sensationalized reports concerning discovery, usually very fragmentary, of fossils that supposedly, in some way, link modern man, *Homo sapiens*, to ape-like ancestors. While there is a general consensus, of course, among evolutionists that man has evolved from ape-like ancestors, the course of that evolution and the fossils involved are most often disputed among evolutionists. For example, while it is the general consensus among evolutionists that the australopithecines, such as *Australopithecus afarensis* (with Donald Johanson's "Lucy" as the most prominent fossil) were ancestral to creatures that gave rise to humans, there are some that disagree.<sup>34</sup> The australopithecines have been the central figures in human evolutionary schemes for many years, and if they are not human ancestors, as Charles Oxnard and some others maintain, the human family tree is very bare indeed.

As we consider these claims, we should bear in mind the sad track record of evolutionists in regard to the origin of man. For many years, based on a few pieces of the jaw and a few teeth, such prominent paleoanthropologists as David Pilbeam and Elwin Simons claimed that *Ramapithecus* walked upright and was an intermediate between ape and man. Now that considerably more fossil material of this creature has been found, it is now conceded that *Ramapithecus* was not ancestral to man but was essentially the same as an orangutan. For nearly half a century Piltown Man (*Eanthropus dawsonii*) was, according to the consensus of the world's greatest authorities, a subhuman ancestor of man. In 1950, it was shown to be a fraud. Someone had taken the jawbone of a modern ape, a few teeth, and a human skull, treated them with chemicals to make them look old, altered the teeth to make them look man-like, planted the bones in a gravel deposit near Piltown, Sussex, England, and fooled the world's greatest paleoanthropologists. And it is amazing how many ape-like features those experts could see in the human skull and how many human-like features those experts could see in the modern ape's jaw. Nebraska Man, based on a single tooth found in Nebraska in 1922, was claimed to be either a man-like ape or an ape-like man. In December 1922, the *Illustrated London News*, based on the description of the scientists, published a picture of Nebraska Man, his wife, and the tools they were using—all based on a single tooth! A few years later the find of additional material revealed that Nebraska Man was a pig. For many years, it was claimed that the Neanderthal people were primitive subhuman ancestors of man. It is now generally agreed that these people were fully human, *Homo sapiens*, suffering from such pathological conditions as arthritis and rickets. No wonder evolutionist anatomist Lord Zuckerman declared that he did not think there was any science in this field at all. He further declared that if man had descended from an ape-like creature there was no evidence for this in the fossil record. A much more detailed discussion of the origin of man and of the fossil record in general is found in my book, *Evolution: The Fossils Still Say No!* I agree with Lord Zuckerman—if man has evolved from ape-like ancestors, there is no evidence for this in the fossil record. Human evolution schemes are based on a very scanty fossil record, enormous faith in evolution theory, and opportunities to gain instant fame.

In some of my publications, I have related the fact that Eugene Dubois, the Dutch physician who discovered a skull cap and femur that he named *Pithecanthropus erectus* ("erect apeman"), had at about the same time discovered two modern human skulls, but he had concealed this fact for about 30 years. He apparently thought that this discovery would place his claims concerning *Pithecanthropus* in jeopardy. It has been claimed that I was wrong and that Dubois had revealed this fact at about the same time that he published his material on *Pithecanthropus*. Williams Howells, a well-known evolutionary anthropologist then at the University of Wisconsin, states in his book *Mankind So Far* (Garden City, New York: Doubleday, 1946), on page 191:

Having left the bountiful caves of Europe, we shall have to be content with very scanty remains from the rest of the world. There is, indeed, only one more general type on the list. For its first representative we turn still again to Java and to Dr. Dubois. When this remarkable man returned in the 1890s he had, along with *Pithecanthropus*, two other skulls which he kept entirely secret until 1920,

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33 Larry Martin, *Sunday World-Herald*, Omaha, NE (January 19, 1992), p. 17B.

34 C. E. Oxnard, *The Order of Man* (New Haven: Yale University Press, 1984), p. 332; Solly Zuckerman, *Beyond the Ivory Tower* (New York: Toplinger Publishing Co., 1970), p. 60.

for reasons which he never chose to explain. Perhaps, as Keith said, it was good judgment, for they were so different that to hand them out along with the Java Man would have overtaxed the resilience of the anthropologists, like the chameleon who was put on a Scotch plaid. The skulls, male and female, were from Wadjak; they were large of size and large of brain, and entirely sapiens in their features; and with little doubt their date corresponds with the Upper Paleolithic of Europe.

Thus, both Howells and Sir Arthur Keith, famous British evolutionist anthropologist, claimed that Dubois had concealed that evidence. If Dubois had published the evidence in scientific journals, neither one of these scientist were aware of it. I have asked my accusers several times if they know of such a scientific publication to please give me the reference so that I and their fellow evolutionists would be so informed. So far none has done so. It has been asserted that Dubois reported these finds in his publications but so far no one has given a single reference to a scientific publication by Dubois where this information can be found. Furthermore, if Dubois did publish this information in a scientific journal, it is strange that neither Howells nor Keith was aware of it. If Dubois did publish these facts somewhere, he at least failed to report them to the world of anthropology.

### **Evolution, Creation and the Second Law of Thermodynamics**

One of the popular notions today about the origin of the universe is the so-called Big Bang theory, or variations of it, including the inflation theory. According to this theory, billions of years ago all the energy and matter in the universe was crammed into a cosmic egg or perhaps a primeval atom. Nobody knows where it came from or how it got there. It suddenly exploded or expanded at an unbelievable speed. Out of this hypothetical primordial explosion and chaos essentially only two elements were created: hydrogen (75%) and helium (25%). These simple gases expanded until almost a perfect vacuum existed at a very low temperature. From these simple gases it is believed everything in the universe has evolved—stars, galaxies, our solar system, all living things, including man with 30 trillion cells of about 200 different kinds, and a brain with 12 billion brain cells and 120 trillion connections. Thus, according to evolutionists, the universe began in a state of chaos and disorder of the Big Bang and the simplicity of hydrogen and helium gases, which then transformed itself into the incredibly complex universe, including living organisms, which we have today. If this is true, matter must have an intrinsic ability to transform itself from disorder to order, from simple to complex. Scientists should have observed this fact and incorporated it into a natural law. On the other hand, if creation were true, it would not be expected that matter would have such a natural ability. Creation is finished. If anything has happened since creation to change the original created state, it could only cause matter to go downward, to deteriorate, to go from order to disorder. Thus, these two theories postulate diametrically opposed observations. What do we observe out there in the real world?

There is a general natural tendency of all observed systems to go from order to disorder, reflecting dissipation of energy available for future transformations—the law of increasing entropy.<sup>35</sup>

All real processes go with an increase of entropy. The entropy also measures the randomness, or lack of orderliness of the system: the greater the randomness, the greater the entropy.<sup>36</sup>

Another way of stating the second law then is: “The universe is constantly getting more disorderly!” Viewed that way, we can see the second law all about us. We have to work hard to straighten a room, but left to itself it becomes a mess again very quickly and very easily. Even if we never enter it, it becomes dusty and musty. How difficult to maintain houses, and machinery, and our own bodies in perfect working order: how easy to let them deteriorate. In fact, all we have to do is nothing, and everything deteriorates, collapses, breaks down, wears out, all by itself—and that is what the second law is all about.<sup>37</sup>

Now compare these definitions or consequences of the Second Law of Thermodynamics to the theory of evolution as defined by Huxley:

Evolution in the extended sense can be defined as a directional and essentially irreversible process occurring in time, which in its course gives rise to an increase of variety and an increasingly high level

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35 R. B. Lindsay, *American Scientist* 56 (1968): 100.

36 H. Blum, *American Scientist* 43 (1955): 595.

37 Isaac Asimov, *Smithsonian Institute Journal* (June 1970), p. 6.

of organization in its products. Our present knowledge indeed forces us to the view that the whole of reality is evolution—a single process of self-transformation.<sup>38</sup>

There is a natural tendency for all observed natural systems to go from order to disorder, towards increasing randomness. This is true throughout the entire known universe, both at the micro and macro levels. This tendency is so invariant that it has never been observed to fail. It is a natural law—the Second Law of Thermodynamics. On the other hand, according to the general theory of evolution, as defined by Huxley, there is a general tendency of natural systems to go from disorder to order, towards an ever higher and higher level of complexity. This tendency supposedly operates in every corner of the universe, both at the micro and macro levels. As a consequence, it is believed, particles have evolved into people.

It is difficult to understand how anyone, scientifically trained or not, could fail to see the glaring contradiction between the evolutionary theory of the origin of the universe and the Second Law of Thermodynamics, one of the most well-established natural laws known in science. The usual, but exceedingly naïve, answer given by evolutionists to this dilemma is that the Second Law of Thermodynamics applies only to closed systems. If the system is open to an external source of energy, it is asserted, complexity can be generated and maintained with this system at the expense of the energy supplied to it from the outside.

First of all, evolutionists believe the universe is an isolated system. No one outside did any work on it and no matter or energy was brought in from the outside. Everything which took place within it and which is now taking place occurred and is occurring by a process of *self-transformation*. The Second Law states that the order, organization, and complexity of an isolated system can never increase, but can only run down and deteriorate with time. There are no exceptions. Yet, evolutionists believe the universe is an isolated system that began in a state of chaos and disorder and the simplicity of hydrogen gas and transformed itself into the exceedingly complex universe we have today. This is a clear violation of the Second Law. If science is science and natural laws are natural laws, the universe could not have created itself naturally. The only alternative is that it had to be created by an outside, thus supernatural, agency. Nevertheless, some might claim, while this may be true of the universe, it does not apply to evolution of life on the earth.

Our solar system is an open system, and energy is supplied to the earth from the sun. The decrease in entropy, or increase in order, on the earth during the evolutionary process, it is said, has been more than compensated by the increase in entropy, or decrease in order, on the sun. The overall result has been a net decrease in order, so the Second Law of Thermodynamics has not been violated, we are told.

An open system and an adequate external source of energy are necessary *but not sufficient* conditions, however, for order to be generated and maintained, since raw undirected, uncontrolled energy is destructive, not constructive. For example, without the protective layer of ozone in the upper atmosphere that absorbs most of the ultraviolet light coming from the sun, life on earth would be impossible. Bacterial cells exposed to such radiation die within seconds. This is because ultraviolet light, or irradiation of any kind, breaks chemical bonds and thus randomizes and destroys the highly complex structures found in biologically active macromolecules, such as proteins and DNA. Biological activity of these vitally important molecules is destroyed and death rapidly follows.

That much more than merely an external energy source is required to form complex molecules and systems from simpler ones is evident from the following statement by Simpson and Beck: “. . . the simple expenditure of energy is not sufficient to develop and maintain order. A bull in a china shop performs work, but he neither creates nor maintains organization. The work needed is *particular* work; it must follow specifications; it requires information on how to proceed.”<sup>39</sup>

Thus, a green plant, utilizing the highly complex photosynthetic system it possesses, can trap light energy from the sun and convert this light energy into chemical energy. A series of other complex systems within the green plant allows the utilization of this energy to build up complex molecules and systems from simple starting material. Of equal importance is the fact that the green plant possesses a system for directing, maintaining, and replicating these complex energy conversion mechanisms—an incredibly complex genetic system. Without the genetic system, no specifications on how to proceed would exist, chaos would result, and life would be impossible.

For complexity to be generated within a system, then, four conditions must be met:

1. The system must be an open system.
2. An adequate external energy source must be available.
3. The system must possess energy conversion mechanisms.

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<sup>38</sup> Julian Huxley, “Evolution and Genetics,” in *What Is Science?* Ed. J. R. Newman, (New York: Simon and Schuster (1955)), p. 272.

<sup>39</sup> George G. Simpson and W. S. Beck, *Life: An Introduction to Biology*, 2<sup>nd</sup> ed. (New York: Harcourt, Brace & World, Inc., 1965), p. 466.

4. A control mechanism must exist within the system for directing, maintaining, and replicating these energy conversion mechanisms.

The seemingly irresolvable dilemma, from an evolutionary point of view, is how such complex energy conversion mechanisms and genetic systems arose in the *absence* of such systems, when there is a general natural tendency to go from order to disorder, a tendency so universal it can be stated as a natural law, the Second Law of Thermodynamics. Simply stated, machines are required to build machines, and something or somebody must operate the machinery.

The creationist thus opposes the wholly unscientific evolutionary hypothesis that the natural universe with all of its incredible complexity, was capable of generating itself, and maintains that there must exist, external to the natural universe, a Creator, or supernatural Agent, who was responsible for introducing or creating the high degree of order found within this natural universe. While creationism is extra-scientific, it is not anti-scientific, as is the evolutionary hypothesis that contradicts one of the most well established laws of science.

### **The Origin of Life**

Through an elegant series of experiments spanning two centuries, Spallanzani, Redi, Louis Pasteur and others disproved the notion of the spontaneous origin of life. As a result, the Law of Biogenesis, that life comes only from preexisting life, became part of the fabric of biology. With the rise of Darwinism, however, this demonstrated truth no longer became acceptable, and the notion of the spontaneous origin of life was resurrected. Although evolutionists are still light-years short of any comprehensive theory on how life may have arisen spontaneously, our students are told that the spontaneous origin of life on earth was almost inevitable. There are in fact a series of impassable barriers to a spontaneous evolutionary origin of life. A few of these are:

1. The absolute necessity for the exclusion of a significant quantity of oxygen from the hypothetical primordial atmosphere. If oxygen were present, all organic molecules would be oxidized to simple gases. The present atmosphere contains 21% oxygen, and evidence is accumulating that the earth has never had an atmosphere significantly different than it has at present. Furthermore, without oxygen there would be no ozone layer around the earth to absorb the highly energetic, deadly destructive ultraviolet light from the sun. No life can exist in the presence of this ultraviolet light, and yet evolutionists persist in believing that life arose in its presence.
2. The rates of destruction of all organic molecules, such as amino acids, sugars, purines and pyrimidines, etc., vastly exceed their rates of formation by raw, uncontrolled energy such as ultraviolet light and electrical discharges. Thus, no significant quantity of such products could ever form under plausible primitive earth conditions. The only reason Stanley Miller obtained a detectable quantity of a few amino acids in his famous experiment<sup>40</sup> was that he employed a trap to continuously remove the products. This prevented the re-exposure of these products to the energy source that produced them. No plausible natural trap under primitive earth conditions has yet been conceived, however. Even if such a trap could exist, this in itself would be fatal to origin of life theories since no energy would be available and all subsequent steps in the origin of life would require energy.
3. No method exists for producing in their natural state the large macromolecules, such as proteins, DNA, and RNA, under plausible primitive earth conditions. There exists an impassable thermodynamic barrier to the spontaneous formation of such substances. It would be comparable to a newborn baby climbing the sheer 3,000-foot granite cliff of El Capitan in Yosemite Valley. Only living things possess the metabolic machinery necessary to overcome this thermodynamic barrier.
4. The formation of a single biologically active protein, DNA or RNA molecule requires the precise positioning of hundreds of sub-units, just as the 176 letters of this sentence had to be arranged in precise sequence. A protein of 100 amino acids is a rather small protein (the average protein contains 400 amino acids), and yet the probability of forming a single protein molecule of 100 of the 20 different amino acids arranged in precise order is approximately  $10^{-130}$  (that is, one chance out of the number one followed by 130 zeros). This probability is essentially equal to zero on a time scale of five billion years (the assumed age of the earth), and even if it did happen, only one single molecule of one single protein would be produced. The oceans of the world contain about 350 million cubic miles of water, so billions of tons each of hundreds of different protein, DNA, and RNA molecules required to start life would have to be produced. This is flatly impossible.
5. The most primitive living cell imaginable would not only require hundreds of different protein molecules and hundreds of different kinds of DNA and RNA molecules but many other kinds of large and complex molecules such as carbohydrates and lipids. Furthermore, the simplest living cell known to science contains many complex elements, such as the cell membrane, ribosomes, the energy-generating system, etc. Finally, all of these must be

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40 S. L. Miller, *Science* 117 (1953): 528.

precisely arranged so that the activities of the cell are properly coordinated in time and space. The purpose of every detail of the structure and function of the cell is evident. Thus, even the most primitive cell imaginable would be incredibly complex. Could such a complex apparatus arise by chance, even ignoring all of the thermodynamic barriers to the formation of complex molecules and structures? The answer is a resounding NO!

A few years ago Sir Fred Hoyle and Dr. Chandra Wickramasinghe, Professor and Chairman of the Department of Applied Mathematics and Astronomy, University College, Cardiff, Wales, became interested in the problem of the origin of life. Both had been evolutionists and lifelong atheists. After making certain assumptions about the requirements for the origin of the simplest cell imaginable, they calculated the probability of the necessary protein enzymes arising by chance on this planet in five billion years. The probability turned out to be one chance out of the number one followed by 40,000 zeros!<sup>41</sup> This is flatly zero, so they calculated the probability of life evolving anywhere in the universe, assuming that every star in the universe (about 100 billion times 100 billion) has a planet like the earth and that the universe is 20 billion years old. For all practical purposes, according to their results the probability is not insensibly different than zero. Sir Fred Hoyle said that the probability of the evolutionary origin of life is equal to the probability that a tornado sweeping through a junkyard would assemble a Boeing 747! One is free to believe that, of course, but it should not be called science. Hoyle and Wickramasinghe are now saying that wherever life exists in the universe it had to be created. Wickramasinghe has stated that this evidence constitutes empirical evidence for the existence of God (they are not Biblical creationists, since neither believes the Genesis account of creation, but they believe life had to be created).

Did Sir Fred Hoyle and Professor Wickramasinghe become creationists because of their religion? Obviously not, for they were both atheists when they began their study. They became creationists *in spite* of the religious beliefs they held at that time. Most evolutionists assert that to hold a belief in creation is religion. According to this view, then, when Hoyle and Wickramasinghe, in ignorance of the facts, held to an evolutionary view of the origin of life, that was proper science; but the moment the scientific evidence convinced them that life could not have arisen naturally, therefore life had to be created supernaturally, their views instantly ceased to be science and became religion! Other scientists, such as Yockey,<sup>42</sup> Salisbury,<sup>43</sup> Coppedge,<sup>44</sup> and Wilder-Smith<sup>45</sup> have come to similar conclusions or have expressed serious doubts. A spontaneous evolutionary origin of life can be positively excluded based on the proven principles of chemical thermodynamics and kinetics and the laws of probability. The theory of an evolutionary origin of life is Twentieth Century mythology.

### **The Evidence from Embryology**

The notion that an organism recapitulates its evolutionary history during development of the embryo became so thoroughly entrenched in evolutionary thought that it became known as the “biogenetic law.” It is still being claimed, for example, that the human embryo at one stage of its development has gill slits, demonstrating the fact that a fish was a distant ancestor of man. At no time in its development, however, does a human embryo ever have slits into the throat nor does a human embryo ever have gills. If a human embryo never has gills and never has slits, it is certain it never has gill slits. The human embryo has a series of pharyngeal pouches, or a series of bars and grooves, in the neck region that resemble structures in the neck region of the fish. That these resemblances are merely superficial, however, is shown by the fact that in the human embryo the so-called “gill-slits” do not develop into respiratory organs but develop into the lower jaw, structures in the middle ear, and several glands. Furthermore, recently an instrument called a fetoscope has been developed by which the development of the human embryo can be observed and photographed. This has shown that every stage in the development of the human embryo, just as predicted based on creation, is uniquely human.<sup>46</sup> The development of the human embryo thus reveals no evidence for evolution but provides empirical support for creation.

Although the idea of embryological recapitulation is still being taught in many biology textbooks and classrooms, it is a thoroughly discredited theory, as many evolutionists acknowledge and embryologists recognize. Ernst Haeckel, a fervent evolutionist who widely promoted the so-called “biogenetic law,” published alleged pictures of embryos that supposedly revealed how similar the embryos of various creatures, including man, were during development. This was a blatant fraud. His drawings were not true representatives of the embryos at all, but drawn to make them appear similar. The extent of this fraud has been exposed once again by Michael Richardson in the August 1997

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41 Fred Hoyle and Chandra Wickramasinghe, *Evolution From Space* (London: J. M. Dent and Sons, 1981).

42 H. P. Yockey, *Journal of Theoretical Biology* 67 (1977): 377.

43 F. B. Salisbury, *Nature* 224 (1969): 342; *American Biology Teacher* 33 (1971): 335.

44 J. F. Coppedge, *Evolution: Possible or Impossible?* (Grand Rapids, Michigan: Zondervan Publishing Co., 1973).

45 A. E. Wilder-Smith, *The Creation of Life* (Wheaton, Illinois: Harold Shaw Publishers, 1970).

46 S. Schwabenthan, *Parents* (October 1979), p. 50.

issue of *Anatomy and Embryology* (see Elizabeth Pennisi, *Science*, 277 (September 5, 1997): 1435). Haeckel's alleged evidence for embryological recapitulation has been reproduced in countless biology books and is still found in some today. Embryos do not recapitulate anything. They just do what is necessary to convert a single fertilized egg cell into the infant individual.

### **The Evidence from Vestigial Organs**

A vestigial organ has been defined as an organ found in a present-day organism that has no function but which was a useful, functional organ in an evolutionary ancestor. About a century ago, Wiedersheim listed about 180 vestigial organs for man. These included the appendix, tonsils, coccyx (the tailbone), pituitary gland, pineal gland, and the thymus gland. The results of scientific and medical research have now reduced that list practically to zero as the true function of these organs has been discovered. All of the above-mentioned organs, for example, are now known to have important functions. In an article published recently in *Evolutionary Theory*, evolutionist S. R. Scadding states his conviction that "vestigial organs' provide no evidence for evolutionary theory."<sup>47</sup> Again, a prediction based on evolutionary theory has been falsified and the prediction of creation scientists that the true function of these organs would eventually be discovered has been verified.

### **The Evidence from Molecular Biology**

The amino acid sequences of many proteins have been determined. These proteins include enzymes, electron-transmitters, oxygen-carriers, and hormones. It has been found that in many cases proteins that have the same function in different animals, such as the cytochromes or the hemoglobins, have a very similar amino acid sequence in different organisms. Those proteins, such as the cytochromes, which have a similar amino acid sequence, are said to be homologous. Furthermore, it has been generally determined that those homologous proteins found in creatures which closely resemble each other differ less from one another than those homologous proteins found in creatures that do not closely resemble one another. Thus, the cytochrome C found in man is more similar to those found in the apes than it is to that found in a rat or a snake. Evolutionists have eagerly seized upon this evidence as "proof" of evolution.

We must first point out that this sort of evidence is of no help whatsoever in weighing the credibility of creation versus the credibility of evolution. This similarity in the biochemistry of all living things *must* be true, regardless of the explanation for their origins. Let us suppose, for example, that plants, animals, and humans were each created with different types of amino acids, sugars, purines, pyrimidines, etc. What would we eat? We could eat neither plants nor animals, since we could not utilize the amino acids, sugars, and other substances found in these organisms. The only thing we could eat would be each other! That would obviously be an impossible solution. Thus, animals, plants and humans had to have the same amino acids, sugars, purines, pyrimidines, etc. This fact would then determine that the biochemistry of all plants, animals and man had to be similar, since the biochemical machinery of each had to be designed to metabolize the same substances. This fact was recognized by (then evolutionist) Kenyon and evolutionist Steinman when they stated that:

It could be argued that the universality of much of biochemistry is merely consistent with the concept of a common ancestral population but does not in any sense prove it since the same basic reaction patterns may be *required* for life.<sup>48</sup>

Furthermore, since our external morphology is at least to some extent shaped by our internal chemistry, we would expect that creatures that more closely resemble one another would have biochemistries that are more similar than those in creatures that do not closely resemble one another. Thus, the predictions concerning molecular homology based on creation and evolution would be substantially the same.

The evidence from molecular biology has, however, produced some serious difficulties for evolutionary theory, and as more and more data on molecular structures have become known, the more serious the difficulties have become. According to evolutionary theory, evolution is a mechanistic process which should produce data that is consistent with a mechanistic theory. If data appear that are inconsistent or contradictory to those predicted by the theory, the theory is weakened. If a sufficient body of such contradictory evidence accumulates, then the theory is seriously jeopardized. That situation is being approached with evolutionary theory relative to predictions concerning molecular biology as more and more predictions concerning evolution and molecular structures are being falsified. Space permits us to describe only a few.

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<sup>47</sup> S. R. Scadding, *Evolution Theory* 5 (1981): 173.

<sup>48</sup> D. H. Kenyon and G. Steinman, *Biochemical Predestination* (New York: McGraw-Hill Book Co., 1969), p. 5.

The insulins of the sperm whale and of the fin whale are identical to those of the dog and the pig but differ from that of the sei whale.<sup>49</sup>

There are 18 differences when the amino acid sequence of guinea pig insulin is compared to either human insulin or to the insulin from a fellow rodent, the rat.<sup>50</sup> The structure of cytochrome C of the rattlesnake varies in 22 places compared to the cytochrome C of the turtle, another reptile, but only in 14 places when compared to human insulin.<sup>51</sup> When the cytochromes C of two supposedly closely related organisms, *Desulfovibrio desulfuricans* and *Desulfovibrio vulgaris*, are compared, it is found that they differ markedly in amino acid composition.<sup>52</sup> The amino acid sequence of lysozyme of Emden goose egg white is not homologous at all (or doubtfully very weakly so) with lysozyme of hen egg white.<sup>53</sup>

According to evolutionary theory, mammals are more closely related to reptiles than to amphibians. However, mammalian luteinizing hormone releasing hormone is identical to that of amphibians but differs from that of reptiles.<sup>54</sup>

Based on his research findings, evolutionist Dr. Christian Schwabe is suggesting a drastic revision of evolutionary theory. From the results of his molecular studies of hormones, Schwabe contends that the theory that all life forms are related through common ancestry does not appear to be true.<sup>55</sup> Schwabe contends that these data supports the fact that each basic type had a separate origin (this theory is called polyphyletic evolution). Schwabe is thus saying exactly what creationists have been saying all along—that all creatures have *not* shared a common ancestry but that there was a multitude of separate and distinct origins. Schwabe and creation scientists differ, of course, as to how each separate type originated in the first place. Nevertheless, if Schwabe and the creation scientists are correct in their contention that the data of molecular biology supports multiple origins rather than descent from a common ancestor, then evolutionists are deprived of what they consider to be one of their strongest arguments for evolution. It is of great significance that the data are now sufficiently strong to swing an evolutionist of Dr. Schwabe's very considerable knowledge and research experience over to the views of creation scientists against a common ancestry of organisms.

Michael Denton holds an M.D. degree and a Ph.D. in molecular biology from British universities. He is neither a Christian nor a professing creationist, but his book, *Evolution: A Theory in Crisis*, is a devastating critique of evolutionary theory. On every count, according to Denton, evolution strikes out. According to Denton, molecular biology, rather than supporting evolution, provides evidence directly contradictory to the evidence predicted. Denton points out that protein sequence data reveals the same large systematic gaps between basically different kinds that are also evident from the fossil record. With reference to the so-called evolutionary molecular clock based on protein sequence data, Denton states:

Despite the fact that no convincing explanation of how random evolutionary processes could have resulted in such an ordered pattern of diversity, the idea of uniform rates of evolution is presented in the literature as if it were an empirical discovery. The hold of the evolutionary paradigm is so powerful, that an idea which is more like a principle of medieval astrology than a serious twentieth-century scientific theory has become a reality for evolutionary biologists.<sup>56</sup>

Many other investigators have pointed out the essential futility of attempts to use data from protein sequences, DNA, and RNA to establish evolutionary relationships. For example (and there are many), Weishampel, Dodson, and Osmolska state:

Molecular data on tetrapod phylogeny are equivocal regarding the relationships of birds and crocodilians. Some analyses do pair these two groups, but many tend to link birds and mammals more

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49 R. V. Eck and M. O. Dayhoff, *Atlas of Protein Sequence and Structure* (Silver Springs, Maryland: National Biomedical Research Foundation, 1966), p. 110.

50 *Ibid.*, p. 191.

51 *Ibid.*, p. 170.

52 H. Drucker *et al.*, *Biochemistry* 9 (1970): 1515.

53 M. G. Grutter, L. H. Weaver, and B. W. Matthews, *Nature* 303 (1983): 828.

54 J. A. King, *Science* 206 (1979): 67.

55 Christian Schwabe and G. W. Warr, *Perspectives in Biology and Medicine* 27 (3, Spring 1984): 465-484; C. Schwabe, *Trends in Biochemical Sciences* 11 (July 1986): 280-283; C. Schwabe, *Comparative Biochemical Physiology* 1078 (1994): 167-177.

56 Michael Denton, *Evolution: A Theory in Crisis* (London: Burnett Books, 1985), p. 306. Available from Woodbine and Associates, 6510 Bells Mill Road, Bethesda, MD 20817.

closely. However, other protein sequence analyses give every other imaginable pairing of tetrapod groups and their significance is debatable.<sup>57</sup>

In spite of all the claims that have been made by evolutionists for the utility of protein sequence analyses in establishing evolutionary relationships, it is obvious that if such data can be so interpreted by various scientists to establish every imaginable pairing of such important groups as tetrapods (amphibians, reptiles, mammals, and birds), such data are useless and those claims are false. The data actually are much more in accord with predictions based on creation than evolution.

### **The Evidence from Homology**

Structures and organs in different creatures that are structurally similar, even though their function may be quite different, are said to be homologous, and the phenomenon is termed homology. These terms were coined by one of Darwin's contemporaries, Sir Richard Owen, at that time one of the most formidable opponents of Darwinism. Darwin and his fellow evolutionists have always assumed that such similarities constitute one of the best evidences for evolution. In ignorance of the actual scientific evidence, this conclusion, from an evolutionary view, seems to be quite logical. However, not only is there an equally plausible explanation based on creation, but also the actual scientific evidence is contradictory to the evolutionist view that the possession of similar structures by different animals can be explained by inheritance from a common ancestor.

First, in many cases, perhaps most, the assumed common evolutionary ancestor of the creatures possessing homologous structures does not even possess the homologous structure or structures. In some cases creatures possess entire suites of similar major structures, none of which is possessed by the assumed common ancestor. It is thus necessary for evolutionists to postulate what is called parallel evolution, that is, the independent, parallel evolution of similar structures after the creatures had split off from the assumed common ancestor. It is difficult enough to imagine an evolutionary origin of a complex organ by chance. It is even more difficult to imagine that similar complex structures could arise by chance in different animals independently. It is asking too much, however, to have us believe that entire assortments of similar major structures could arise by chance independently in different animals. Evolutionists do not hesitate to invoke the miraculous as long as it can be concealed under the cloak of evolutionism.

Absolutely devastating to the evolutionary interpretation of homology is the evidence from genetics. If homologous structures in different animals are due to inheritance from a common ancestor, then the genes that code for these structures in one creature should be similar to the same genes in the other creature. This must be true if the evolutionary interpretation is correct. Actually, according to Sir Gavin de Beer, the British biologist and evolutionist, such genes are *totally different from one another*. Because of this and a mass of other evidence contrary to predictions based on evolution, Sir Gavin entitled his Oxford Biology Reader on that subject, *Homology, An Unsolved Problem*.<sup>58</sup> On the final page of that booklet is found the following statement:

It is now clear that the pride with which it was assumed that the inheritance of homologous structures from a common ancestor explained homology was misplaced; for such inheritance cannot be ascribed to identity of genes. The attempt to find "homologous" genes, except in closely related species, has been given up as hopeless.

Not only has the crucially important prediction related to homologous structures based on evolution been falsified, not only is there much other evidence related to homology that is contradictory to predictions based on evolution, but creation offers an eminently satisfactory explanation of homologous structures. Creation implies a master engineer employing similar solutions to similar problems. Just as an engineer, employing sound engineering principles, designs bridges that are similar in many respects, so the creator, the master engineer, would design similar structures for similar purposes. Thus, in many respects, the design of four-legged reptiles and of four-legged mammals would be similar, differing however in those features required for different life styles. Monkeys, apes, and humans each have grasping hands, keen eyesight, keen hearing, and relatively large brains, not because these characteristics were inherited from a common ancestor but because their respective life styles require these characteristics. On balance then, the evidence from homology is strongly in favor of creation. Recent publications explicitly state that de Beer's

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<sup>57</sup> D. B. Weishampel, Peter Dodson, and Halszka Osmolska, eds., *The Dinosauria* (Berkeley: University of Chicago Press, 1990), p. 12.

<sup>58</sup> Gavin de Beer, *Homology, An Unsolved Problem* (London: Oxford University Press, 1971).

views are still valid today.<sup>59</sup>

### Conclusion

Thus, today we have a most astounding situation. Human witnesses have never observed evolution. Evolution cannot be subjected to the experimental method. The most sacred tenet of Darwinism—natural selection—in modern formulation is incapable of explaining anything. Furthermore, even some evolutionists are conceding that the mechanism of evolution proposed by evolutionary biologists could account for no more than trivial change in the time believed to have been available, and that an adequate scientific theory of evolution, based on present knowledge, seems impossible. Finally, the major features of the fossil record accord in an amazing fashion with the predictions based on special creation, but contradict the most fundamental predictions generated by the theory of evolution. And yet the demand is unceasing that evolution theory be accepted as the only scientific explanation for origins, even as an established fact, while excluding creation as a mere religious concept!

This rigid indoctrination in evolutionary dogma, with the exclusion of the competing concept of special creation, results in young people being indoctrinated in a non-theistic, naturalistic, humanistic religious philosophy in the guise of science. Science is perverted, academic freedom is denied, the educational process suffers, and constitutional guarantees of religious freedom are violated.

This unhealthy situation could be corrected by presenting students with the two competing models for origins, the creation model and the evolution model, with all supporting evidence for each model. This would permit an evaluation by the students of the strengths and weaknesses of each model. This is the course true education should pursue rather than following the present process of brainwashing students in evolutionary philosophy.

The Institute for Creation Research has eleven scientists on its staff, nine of whom have doctorates in science from major universities, and many adjunct professors with doctorate degrees. My Ph.D. is in biochemistry from the University of California, Berkeley. Members of the Institute have authored numerous papers published in scientific journals, and have also published many books related to origins.

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## YOUNG-AGE CREATION (YAC) RESOURCE PAGES

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59 R. Sattler, "Homology—A Continuing Challenge," *Systematic Botany*, 9 (4, 1984): 382-394; Louise Roth, in *Ontogeny and Systematics*, ed. E. J. Humphries, (New York: Columbia University Press, 1988); G. P. Wanger, *Evolution* 43(6): 1157-1171 (1988).

by Kurt P. Wise  
July, 2001; revised July 2002, May 2003; May 2004

{ } : indicates evidence which is at least partially explained by this claim

#### YAC BIBLICAL STUDIES CLAIMS:

1. re: **Purpose of Scripture.** Scripture is for man's COMPLETE development (II Tim. 3:16) spiritual, intellectual, physical, AND emotional (*not* just a spiritual). (*e.g.* the dietary laws, Matt. 6:33; 11:29-30; 25:31-40; John 10:10; I Tim. 5:8; I John 3:17; Mat. 25:31-40; Rom. 12:2). It answers when, how, where questions, not just who and why questions. (Wise, 2002)
2. re: **Biblical Hermeneutics.** Given the nature of God (*e.g.* He is Truth; He is Communicator; He is Just), all of Scripture is to be interpreted in the traditional historico-grammatical mode. Based upon the nature of God we conclude that the Bible is supernaturally authored (II Peter 3:16) and preserved by God and is all true for all people for all time {the consistency of the 66 books; the heavy attestation of Scripture; the similarity between the Masoretic text and the Dead Sea Scrolls; the dietary value of OT laws; the legal success of OT law; the repeated archaeological confirmation of Scripture; and fulfilled prophecy}. If the acceptance of the best interpretation of the non-Biblical data would force an unnatural or 'contrived' meaning to the Biblical text which is outside perspicuity, grammar, genre, lexicography, *etc.*, then we should re-interpret the non-Biblical data, not the Biblical data. (Wise, 2002)
3. re: **Scriptural Authority.** Man's interpretation must always be subordinate to God's, including the interpretation of the physical world (this was true before the Fall and even more true after the Fall, given man suppresses truth (Rom. 1:18), is willingly ignorant (Eph. 4:18), has distorted vision (Col. 3:10)). Heb. 11:3 indicates that God's interpretation has priority when there is no immediate observer of the phenomenon AND II Pet. 1:18-19 indicates this is so even when there IS an observer. (Wise, 2002)
4. re: **Genesis One Genre and Literature.** Genesis 1-11 is historical narrative (it is *not* allegory or poetry) (Fouts, 2003). Partially reflective of His glory, God creates with beauty and symmetry {beautiful literature & abundance of literary structures, even in the historical sections of Scripture}. (Wise, 2002)
5. re: **Scripture as Polemic.** God created in such a manner as to create a polemic against all creation myths humans would ever devise to replace God's truth *B i.e.* as both polemic & history {anti-Egyptian-pantheon, anti-Canaanite-pantheon, and anti-evolution order of Genesis One}. (Wise, 2002)

#### YAC PHILOSOPHY CLAIMS:

6. re: **Purpose For Origins Studies.** Origins studies must begin with and center upon God and have as their primary purpose glorifying Him (Genesis 1:1; Proverbs 1:7; John 1:1-3; Colossians 1:16-17) (not primarily to show error in wrong ideas). (Wise, 2002)
7. re: **Proof.** Belief in creation is *only* by faith (Hebrews 11:3), so there is no such thing as proof B of God, of God's nature, or even in science {failure of proofs of God; proof is not a part of science}. (Wise, 2002)
8. re: **Natural Revelation.** Because God desires to be known, God created in humans a mechanism ('theiscience': Wise, 1995) which convinces man's heart of the existence of God and His attributes (Romans 1:18-20) {compelling nature of awe-experiences and design arguments}. This (and only this) is what should be called 'natural revelation' (Wise, 2002).
9. re: **Compelling Evidences.** Because God desires to be known, rejection of God as Creator is against knowledge and evidence (Romans 1:18-23; II Peter 3:3-7). The creation thus gives *compelling* evidence of a Creator God, but not proof {the omniscience of the universe=s cause suggested by the anthropic principle (*e.g.* Barrow & Tipler, 1986) paired with chaos theory, by information theory, and by the second law of thermodynamics; for the omnipotence of the universe's cause suggested by the anthropic principle paired with chaos theory and by the second law of thermodynamics; for the communicating nature of the universe's cause suggested by the language of DNA; for the eternal and unchanging nature of the universe's cause suggested by the universe having a beginning and having all time; for the transcendent and immanent nature of the universe's cause suggested by the universe having a beginning and having all space; for the immaterial form of the universe's cause suggested by the universe having a beginning and having all matter; for the personal nature of the universe's cause suggested by the universe having a cause which cannot precede it in time; for the oneness of the universe's cause by the overall functioning of a set of chaotic systems and the ubiquitous search for GUT and TOE theories} (Wise & Cooper, 1998).
10. re: **Apologetics.** Apologetics is to draw unbelievers towards the truth. Salvation and belief in creation (He. 11:3) is *only* by Biblical faith *B i.e.* trusting in the word/nature of God and not in our perception or reason. For

the believer, apologetics will weaken his faith, as it places confidence on human perception, reason, and understanding (rather than upon God).

11. re: **Creation as Polemic**. Because God desires to be known He left evidence throughout His creation against every creation myth humans would ever develop {anomalies exist against every evolution theory}. (Wise, 2002)
12. re: **Great Synthesis**. There is a need to systematically build a Biblical epistemology and foundational philosophies for all areas of human thought (Wise, 1995), towards the 'Great Synthesis' (Wise, 2002) B to see, understand, and feel as God does.
13. re: **Purpose for Science**. Scripture provides a superior purpose for science (to better know God, to better obey God, and to better minister to others) (Wise, 1995, 2002);
14. re: **Presuppositions of Science**. Through the 'Doctrine of the Creator' (that God created the physical universe so that all humans everywhere for all time could come to know Him through it) Scripture provides the only known philosophical foundation for the presuppositions of science. (Wise, 1995, 2002).
15. re: **Values of Science**. Scripture provides (and historically provided) the values of science (*e.g.* honesty, humility, integrity). (Wise, 2002)
16. re: **Nature of God As Systematizing Theme**. The creation is exactly the way it is because of God's nature, so God's nature becomes the systematizing principle of the creation. (Wise, 2002)

#### YAC CHRONOLOGY CLAIMS:

17. re: **Length of Creation Week**. God supernaturally created the universe, the earth, and oceans and all things in them in 6 literal earth rotation days (of approximately 24 hours each) {a 7-day week} (Genesis 1; Psalm 33:6-9; Exodus 20:11; II Peter 3:3-7) (Fouts & Wise, 1999a, 1999b; Wise & Phillips, 1999)
18. re: **Length of Genealogies**. The genealogies of Genesis 5 and 11 are most probably complete {why the Bible was not written down until the time of Moses}. (Freeman, 1998; Wise, 2002)
19. re: **Biblical Chronology**. The Bible was designed (among other things) to be used to determine that the earth was about 4000 years old at the time of Christ's birth {Genesis 5 & 11 as chronogenealogies}. This means that the earth is approximately 6000 years old (plus or minus 3-4%). (Wise, 2002)
20. re: **Creation and Theology**. All the doctrines of Christianity are ultimately based upon the truths laid out in the first few chapters of Genesis. To accept an old universe/earth is to undermine and ultimately change every traditional doctrine held by the church. (Wise, 2002)
21. re: **Non-Biblical Chronology**. Neither proof for nor against old-age chronometers is available. Physical anomalies in the old-age hypothesis [*e.g.* salt in the oceans (Austin & Humphreys, 1990) and radiometric dating (Vardiman, *et al.*, 2000, 2003)], physical evidence of youth [*e.g.* supernova fragments (Davies, 1994), interplanetary dust (Slusher & Robertson, 1982), short-period comets (Faulkner, 1998a), magnetic field strength (Humphreys, 2002), ice cores (Vardiman, 1996)], appearance of age arguments and God's eye-witness testimony (Scripture) make it reasonable to reject the old age of things and accept the Biblical claims. (Wise, 2002)

#### YAC COSMOLOGY CLAIMS:

22. re: **Creationist Cosmogony**. A good model of young-age creation astronomy (including cosmogony) is not yet available (Faulkner, 1998b), although there is plenty of room for it (*e.g.* the Big Bang theory is not the only cosmological solution of Einstein's general theory).
23. re: **Origin of Universe**. Space, time, and matter were created by God (John 1:3) B either at the beginning of Day 1 of the Creation Week (interpreting Gen. 1:1 as an overview or summary) or sometime before that (interpreting Gen. 1:1 otherwise). Initially matter was in the form of water and all material things were formed from water (Gen. 1:2; II Pe. 3:5) (Humphreys, 1994).
24. re: **Basic Structure of the Universe**. The creation of the *raqia* (transl. 'firmament' or 'expanse') on Day 2 of the Creation Week (Gen. 1:6-8) and its subsequent expansion (*e.g.* Job 9:8; Ps. 104:2; Isa. 40:22) suggests that the universe is bounded (with water at the outer edge) and the earth may be close to its center (Humphreys, 1994).
25. re: **Origin of Cosmological Bodies**. Galaxies, stars, and planets were created on Day 4 of the Creation Week (Gen. 1:14-19)
26. re: **Magnetic Fields**. The strength of the magnetic fields of the planets (and possibly all the bodies of the universe) can be explained by those bodies being formed from water with aligned magnetic fields (Humphreys, 1984)
27. re: **Anthropic Principle**. The creation was generated to house humans so they could glorify God {anthropic principle observations which suggest to unbelievers that the universe was created with man in mind (see Barrow

- & Tipler, 1986)} (Wise & Cooper, 1998; Wise, 2002).
28. re: **Mathematics and Creation.** God as the Word created a universe with a structure characterizable by the language of mathematics. (Wise, 2002)
  29. re: **Variety in the Heavens.** God's love of variety (from His triune nature) resulted in the non-duplicating disparity of galaxies, stars, planets, moons, *etc.* (Wise, 2002)
  30. re: **Hierarchy in the Heavens.** God's complex triune nature resulted in a mosaic network of similarity and arrangement {ubiquous structural hierarchy} (Wise, 2002)
  31. re: **Beauty in the Heavens.** Partially reflective of His glory, God created with great beauty and symmetry {emotional impact of the creation's beauty; beauty and symmetry principles in physics; success of 'Ockham's razor'; elegance of natural law}. (Wise, 2002)
  32. re: **The Flood.** Mounting evidence suggests that simultaneous with Noah's Flood on the earth, catastrophism affected bodies outside earth (possibly the entire universe?) {impact craters on the earth (Spencer, 1998); rapid cratering on the moon (*e.g.* ghost craters) (Faulkner, 1998b); overturn of Venus' surface (*e.g.* Strom, *et al.*, 1994)}

### YAC GEOLOGY CLAIMS:

33. re: **Persistence of Earth.** God created with built-in mechanisms of preservation and provision {complex environmental cyclicality; evidences which caused unbelievers to create the 'Gaia Hypothesis' to explain the earth's incredible resilience}. (Wise, 2002) Vast areas of the continents were covered with shallow oceans and many continents were probably fringed with lagoons bounded seaward by extensive hydrothermal reefs (Wise, 2003a).
34. re: **Day 3 Regression.** The creation of land on Day 3 of the Creation Week seem to have involved the raising of continents from the global ocean along faults which would be weak areas for the rest of earth history. Extensive deposition occurred along continental margins to create lower Precambrian sediments (Austin, 1994a: Chapter 4).
35. re: **Pre-Flood Continents.** The configuration of pre-Flood continents is unknown but may be similar to the proposed super-continent Rodinia (many continental islands near each other in the southern hemisphere stretching from pole to equator). (Wise, 2002).
36. re: **Pre-Flood Geology.** During the 16 or so centuries between the creation and the Flood, sedimentation, earthquakes, and hot springs were very active. Upper Precambrian rocks were formed during this period (Austin, 1994a: Chapter 4; Wise, 2003a).
37. re: **Global Flood.** The Flood was global (Genesis 6-9; Matthew 24:37-9; II Peter 3:6), completely replacing the ocean crust (70% of the earth's surface) and completely reshaping the rest of the earth's surface. The mechanism was rapid (meters/second) sinking of cold ocean crust, thus moving continents (breaking up Pangaea to present location during mere months of the Flood) {evidence explained by continental drift theory}, creating mountains by collision {linear fold belts; lo temp/hi pressure minerals; sufficient momentum to raise mountains} generating new ocean crust {evidence explained by sea-floor spreading theory}, causing rapid mantle circulation {seismic tomography; kimberlite/diamond formation}, and core convection {rapid magnetic reversals; blotchiness of sea-floor magnetism; magnetic intensities through time}. (Austin, *et al.*, 1994, 1997; Baumgardner, 2003)
38. re: **Flood and the Rocks.** The Flood deposited rocks from the base of the Vendian (Austin & Wise, 1994) through the Primary (aka Paleozoic) and Secondary (aka Mesozoic) (Austin, *et al.*, 1994) {thick, uniform, widespread nature of sediments without nearby sediment sources (Austin, 1994a, 1994b, 1995); current vertical tectonics in old mountains; plastic deformation of old sediments} (Wise, 2002).
39. re: **Flood and the Fossils.** The global Flood buried a huge number of organisms {high species and specimen preservation rates; randomness of first appearances of major groups with respect to evolution; disparity before diversity; high complexity; beauty; commonness of laminated sediments; stasis and abrupt appearance; and rarity of stratomorphic intermediates} (Wise, 2002). The order of fossils in Flood sediments seems to be due to the successive burial of pre-Flood ecosystems: fringing hydrothermal reefs {Ediacaran-Tommotian-Attabanian sequences} (Wise, 2003a), then epeiric sea fauna and floating forests {Secondary Paleozoic plant sequences} (Wise, 2003b), and finally terrestrial communities.
40. re: **Residual Catastrophism.** The post-Flood world experienced very high volcanic and earthquake activity which decreasing intensity and frequency to the present {decrease in intensity of volcanic activity through the Cenozoic; huge volumes of ash in Late Flood and Early Post-Flood sediments; detachment faulting; recent decrease in earthquake intensities} (see Austin, *et al.*, 1994, 1997; Wise, 2002).
41. re: **Natural Geological 'Evil'.** All the claimed natural geological 'evils' (*e.g.* earthquakes, volcanoes) are, even

today, residual effects of the Flood B *i.e.* ultimately a consequence of man's sin. (Wise, 2002)

#### YAC CLIMATOLOGY CLAIMS:

42. re: **Origin of Climate.** Earth's atmosphere seems to have been created on Day 2 of Creation Week (Gen. 1:6-8).
43. re: **Pre-Flood Climate.** The pre-Flood world seems to have been similar but slightly warmer than the present (with seasons, rains, wider latitudinal zones, no continental ice, and cool temperate poles) (Wise, 1992).
44. re: **Ocean Temperature and the Flood.** During the Flood mantle magma cooled by raising ocean temperatures B probably about 20 degrees centigrade B leaving the immediate post-Flood world the warmest in earth history {secular temperature increase through Primary/Paleozoic and Secondary/Mesozoic sediments} (Austin, *et al.*, 1994, 1997)
45. re: **Origin of Natural Climatological Evil.** Given the origin of other types of natural evils after the Fall of man and/or the Flood, it is possible that natural climatological evils (*e.g.* hurricanes and tornadoes) did not precede the Fall and possibly even the Flood.
46. re: **Post-Flood Climate.** Evaporation of ocean water after the Flood cooled the oceans to the present {secular temperature decrease throughout the Cenozoic} (see Austin, *et al.*, 1994, 1997) and (possibly) stable hypercanes over the North Atlantic and South Pacific (Vardiman, 2003).
47. re: **Post-Flood Rain.** The post-Flood world had very high rainfall rates which decreased to the present {numerous pluvial lakes in early post-Flood world; Yellowstone fossil forests; huge alluvial fans and pediments in Southwestern deserts; delta formation; canyon & cave formation; sub-Sahara river valleys & forests; a lush Sodom and Gomorrah; water-eroded Sphinx} (see Vardiman, 1994; Austin, *et al.*, 1994, 1997; Wise, 2002).
48. re: **Continental Ice Sheets.** Some centuries after the Flood (current theory suggests 5-10 centuries; Biblical chronology suggests 2 centuries) the earth had cooled enough for the rain to fall as snow in certain areas and accumulate continental glaciers which advanced and retreated in just a few decades at the end of this period {glacier-free areas; low glacial rebound rates; lack of fauna and flora between glacial advances; catastrophic demise of warm temperate-loving mammoths} (see Austin, *et al.*, 1994, 1997).

#### YAC BIOLOGY CLAIMS:

49. re: **Origin of Organisms.** God spoke organisms into existence {language nature of DNA} (Wise, 2002) B plants of the land on Day 3 (Gen. 1:11-12), animals of the ocean and the air on Day 5 (Gen. 1:20-23), and animals of the land on Day 6 (Gen. 1:24-28) of the Creation Week. Algae, protists, bacteria and viruses may have been considered part of the >earth= and created earlier (Francis, 2003).
50. re: **Original Perfection of Organisms.** Organisms were initially created perfect. Organisms were created in complex symbiotic relationships among themselves and with the physical environment (Francis, 2003). There was no overproduction (with its attendant 'weeds', 'struggle for survival' and natural selection), disease (including parasitism), degenerative aging, death (including carnivory B Gen. 1:30), and suffering B all of which followed the Fall {low genetic mutational load} (Wise, 2002).
51. re: **Bioethics Normative.** The initial idyllic state of the creation functions as a normative for proper Biblical bioethics (see, *e.g.*, Wise, 1995b)
52. re: **Variety of Organisms.** God's love of variety resulted in a wide variety of unrelated organisms {biological disparity; biological discontinuity} (Wise, 1994), forming the basis of YAC biosystematics (baraminology: BSG website; Hybridatabase; Frair, 2000; Wood, 2003a; Sanders & Wise, 2003).
53. re: **Hierarchy Among Organisms.** God's complex triune nature resulted in a mosaic network of similarity, arrangement, and/or authority {ubiquitous hierarchy; chimeromorphs; non-orthologous & orphan genes; abundant homoplasy}. (Wise, 1994, 1998, 2002)
54. re: **Organisms as Adults.** God created in a developmentally mature form -- *i.e.* fulfilling function at the moment of creation {both the compelling nature of embryological recapitulation *and* its anomalies; the general correspondence of morphological, embryological and molecular phylogenies; the rarity of intermediate organs}. (Wise, 1994, 2002)
55. re: **Abundance Among Organisms.** As a result of His abundant nature, God created with abundance {overdesign (*e.g.* of human brain); biological redundancy (*e.g.* in nucleotide codons); extreme biological diversity}. (Wise, 1994, 2002)
56. re: **Organismal Complexity.** Partly reflective of His omniscience, God created with complexity {irreducible complexity; complexity and integration of complexity at multiple levels of biological organization; near-optimality of biotic structure; success of functionalism in biology; rarity of vestigial and sub-optimal claims}. (Wise, 1994, 2002)

57. re: **Organismal Beauty**. Partially reflective of His glory, God created with great beauty and symmetry {biological beauty B especially that which is not essential for survival}. (Wise, 1994, 2002)
58. re: **Pre-Flood Biozonation**. The pre-Flood world was strongly biozoned (*e.g.* epeiric seas with Primary/Paleozoic marine fauna; distinct dinosaur/gymnosperm and mammal/angiosperm/man biomes; a continent-sized floating forest (Wise, 2003b); and a off-shore fringing hydrothermal stromatolite reef complex (Wise, 2003a)) (Wise, 2002).
59. re: **Capacity For Organismal Change**. As a result of His provisional nature, God created with built-in mechanisms of preservation and provision {biological cycles; density-dependent population control mechanisms; ubiquitous interspecific hybridization (see Hybridatabase); mobile genetic elements and utility of at least some of the 'junk DNA' (Wood, 2002a, 2003b); latent (pre-designed) genetic information; adaptability; large intrabaraminic change (Wood & Cavanaugh: 2001; Cavanaugh, *et al.*, 2003)}. (Wise, 2002; Wood, 2003a)
60. re: **Origin of Optimizing Natural Biological 'Evil'**. With the Fall of man 'natural biological evil' entered the creation B including things which optimized biological existence in a fallen creation, such as death (Gen. 3:22-4: as mercy to a fallen world), overproduction (*e.g.* 'weeds' (Gen. 3:19): to replace organisms which die, which in turn creates natural selection which improves the overall fitness of a population in a fallen world {natural selection controls harmful mutations}); thorns, thistles, tannins, & poisons (Gen. 3:18: as protection in a world with overproduction); carnivory (comp. Ge. 1:29-30 w/carnivory in Flood sediments: increasing the fitness of consumers in a fallen world); and immune systems (protecting organisms against pathogens) (Wise, 1995b, 2002).
61. re: **Origin of Biological Imperfection (Destructive Natural Biological 'Evil')**. Death, disease, and suffering entered the creation beginning with man's fall (Genesis 1:29-30; 1:31; 3:16-19; Romans 5:12-21; 8:18-22; I Corinthians 15:21-22). These things did not precede man's existence or sin. (Wise, 2002). With the Fall of man 'natural biological evil' invaded the creation B including true biological imperfection {biological imperfection} such as excessive pain, suffering, toil, mutations, and pathologies (many as a result of mutations) (Wise, 1995b) {low genetic mutational load; relatively small differences which seem responsible for understood pathologies (Wood, 2001, 2002b, 2003a); relative rarity of pathogens in created kinds}. (Wood, 2003a)
62. re: **Dinosaurs**. Dinosaurs were created on Day 6 and were apparently placed on a separate continent from humans and mammals before the Flood. They were preserved on the ark in the form of 1-2 dozen pairs of small representative species, and survived in reduced numbers after the Flood because of the rarity of their food. They were probably exterminated a few centuries after the Flood by humans {dragon legends; Job 41:15f} (Wise, 2002).
63. re: **Intrabaraminic Diversification**. Organisms diversified at a tremendous rate after the Flood (approximately 100-fold among mammals and 1000-fold among insects) (Cavanaugh, *et al.*, 2003), followed by high extinction rates to the present {abundant inter-specific hybridization (see the Hybridatabase); rapid appearance of complex designs in multiple organismal groups in post-Flood sediments (*e.g.* saber-teeth, C-4 photosynthesis (Wood & Cavanaugh, 2001), hypsodonty (Cavanaugh, *et al.*, 2003)); sudden appearance of post-Flood fossil taxa; genetic throwbacks and vestigial organs in long-diverged organisms; pseudogenes and 'selfish' DNA and DNA methylation later in development (Wood, 2002a, 2003b); high extinction rates in the present; relic viral sequences; and coevolution evidences). (Wood, 2003a)
64. re: **Post-Flood Biogeography**. Floating log and vegetation mats provided a means for trans-oceanic transport after the Flood {trans-oceanic disjunct range distributions; apparent divergence centers being near current landing sites; low frequency of trans-oceanic transport in the present; inverse relationship between latitude and taxonomic divergence in trans-oceanic disjunctions}. (Wise & Croxton, 2003)

#### YAC ANTHROPOLOGY CLAIMS:

65. re: **Origin of Man**. Man was created on Day 6 of the Creation Week (Gen. 1:26-28) by first creating man from the dust of the earth and breathing into him (Gen. 2:7) and then creating Eve from his side for a helpmeet (Gen. 2:18, 21-2). This defines the origin and nature of marriage. (Wise, 2002)
66. re: **Nature of Man**. Man was specially created in the image of God (Genesis 1:27; 2:7; 9:6) and *not* from any other animal (Genesis 2:7). (Wise, 2002)
67. re: **Dominion Mandate**. Man was given (and still has) authority and responsibility over the creation to care for it (Genesis 1:28; Hebrews 2:6-8) (Wise, 2002)
68. re: **Original Diet of Man**. Man was vegetarian until after the Flood (Ge. 1:29; 9:3). (Wise, 2002)
69. re: **Original Human Population**. Humans were created as only a man (Adam) and a woman (Eve) (Genesis 1-2) only about 6000 years ago {narrow variation in Y-chromosome and mitochondrial DNA}. (Wise, 2002)

70. re: **Original Human Capacity.** Humans were created with high intelligence, cultural ability, and language {high ancient technology}. (Wise, 2002)
71. re: **Original Human Perfection.** Humans initially created perfect {low genetic mutational load}. (Wise, 2002)
72. re: **Hierarchy Paradoxes.** Because of God's complex triune nature He created with a mosaic network of similarity, arrangement, and authority {hierarchy paradoxes in human institutions (e.g. mutual submission)}. (Wise, 1998, 2002)
73. re: **The Fall.** The fall of Adam resulted in a curse which led to death (Gen. 3:19, 22-4; Rom. 5:12f), the need for work (Gen. 3:17-19), increased pain in childbirth (Gen. 3:16), suffering (Rom. 8:22-3), and presumably degenerative aging and disease. (Wise, 2002)
74. re: **Human Population Bottleneck in the Flood.** Human population was reduced to 8 through the Flood {current human population levels achievable in less than 5000 years; low number of human graves}. (Wise, 2002)
75. re: **Longevity.** Before the Flood humans lived in excess of 900 years (Genesis 5), and for 1000 years after the Flood that lifespan decreased (Genesis 11 and lifespans through Moses' generation) {earlier first menstruation times in girls; earlier tooth eruptions in children; 3<sup>rd</sup> molars which don't fit?} (Wise, 2002)
76. re: **Origin of Language and Cultural Diversity.** Humans delayed in dispersing from the ark after the Flood and were forced into disperse by having the languages confused at Babel (Genesis 10:1-11:9), generating immediate diversity of language and culture {humans are the late arrivals in the post-Flood fossil record; the decreasing age of oldest cultures away from the Middle East; the underivability of languages, cultures, and musics from a single ancestral stock}. (Wise, 2002)
77. re: **Post-Flood Human Technology.** Although humans possessed advanced cultural ability and knowledge, it took a while for resources to be utilized, so human populations in new regions developed through 'hunting gathering', agriculture, husbandry, and shepherding, and through the 'stone age', the 'bronze age' and the 'iron age' within single generations {common architecture across continents (e.g. pyramids); high technological achievement of ancient cultures (e.g. astronomy; pyramids; maps of ice-free oceans; simultaneity of multiple cultural levels in the modern world) (Wise, 2002).
78. re: **Mythology.** All humans had access to the truth about God and history at the time of Babel, so dispersed with that information, developing their own alternate religions after that {Biblical monotheism in early Chinese culture (Nelson, *et al.*, 1997); common flood, creation, fall, and Babel legends in diverse cultures (often divine) genealogies which can be correlated with Biblical genealogies} (Richardson, 1984; Wise, 2002)
79. re: **Pre-Evangelism.** Because God desires to be known, He pre-evangelized all peoples to receive the gospel (e.g. the peace-child (Richardson, 1995); the Biblical history testified in Chinese language (Nelson, *et al.*, 1997)) (Wise, 2002)
80. re: **Origin of Races.** Physical characteristics of no real survival value (e.g. the differences among the races) were fixed in the small dispersing human populations by means of genetic drift {superficiality of racial differences; each major skin type among each of the three sons of Noah}. (Wise, 2002)

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- Brand, Leonard, 1997, *Faith, Reason, and Earth History*, Andrews University Press, Berrien Springs, MI [book: good lay-level presentation of young-age creationist biology and geology].
- Occasional Papers of the BSG*, Bryan College Center for Origins Research and Education, Dayton, TN [technical refereed e-journal: creationist biosystematics (baraminology) B accessible from BSG website].
- Origins*, Geoscience Research Institute, Loma Linda, CA [semi-technical to technical journal: best refereed journal of young-age creationism; issued approximately two times per year].
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- Wise, 1998 (see YAC Biology Sources)
- Wise, 2002 (see YAC General Sources)

#### **NAMES OF YOUNG-AGE CREATIONISTS (whose writings will generally be reliable.)**

##### *Biblical Studies:*

David M. Fouts (OT & Hebrew: Bryan College, Dayton, TN)

W. Gary Phillips (Systematic Theology: Signal Mtn. Bible Church, Signal Mtn., TN)

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Elaine Kennedy (Geology of Shale: Geoscience Research Institute, Loma Linda, CA)  
Andrew A. Snelling (Hard Rock Geology: Institute for Creation Research, El Cajon, CA)  
Kurt P. Wise (Paleontology: Bryan College, Dayton, TN)

*Biology*

Arthur V. Chadwick (Molecular Biology: Southwestern Adventist University, Keene, TX)  
Leonard R. Brand (Mammalogy: Loma Linda University, Loma Linda, CA)  
Joseph W. Francis (Cellular Biology: The Masters College, Santa Clarita, CA)  
Paul A. Nelson (Philosophy of Biology: Discovery Institute, Seattle, WA)  
Roger W. Sanders (Botany)  
Todd C. Wood (Molecular Biology: Bryan College, Dayton, TN).