

HOW THE THEORY OF EVOLUTION BREAKS DOWN  
IN THE LIGHT OF MODERN SCIENCE



# DARWINISM REFUTED



HARUN YAHYA

AUTHOR OF  
ISLAM DENOUNCES TERRORISM



"If it could be demonstrated that any complex organ existed, which could not possibly have been formed by numerous, successive, slight modifications, my theory would absolutely break down."

So wrote Charles Darwin in *The Origin of Species*, where he made his theory of evolution public. The theory applied materialist philosophy to nature and challenged the consensus that life on earth is the artifact of the Creator. During the following 150 years, many in the scientific community assumed that Darwin had almost accomplished this task. Today, science demonstrates that they were mistaken. Findings in the last two decades alone have shattered the basis of the theory. Key branches of science, such as paleontology, biochemistry, population genetics, comparative anatomy, and biophysics, indicate one after another that natural laws and chance effects proposed by the theory cannot explain the origin of life. Life turns out to be infinitely more complex than Darwin imagined in his time—demonstrating that his theory has absolutely "broken down."



#### ABOUT THE AUTHOR

*The author, who writes under the pen-name Harun Yahya, was born in Ankara in 1956. He studied arts at Istanbul's Mimar Sinan University and philosophy at Istanbul University. His main focus has been the refutation of Darwinism and materialism, two modern myths presented under a scientific guise. Some of the books of the author have been translated into more than 40 languages and published in the countries concerned. Harun Yahya's books appeal to all people,*

*Muslims and non-Muslims alike, regardless of their age, race, and nationality, as they center around one goal: to open the readers' mind by encouraging them to think about some critical issues such as the existence of God and His unity, and to display the decrepit foundations and perverted works of godless systems.*

*In the name of God, Most Gracious, Most Merciful*



## About The Author

The author, who writes under the pen-name HARUN YAHYA, was born in Ankara in 1956. Having completed his primary and secondary education in Ankara, he then studied arts at Istanbul's Mimar Sinan University and philosophy at Istanbul University. Since the 1980s, the author has published many books on political, faith-related and scientific issues. Harun Yahya is well-known as an author who has written very important works disclosing the imposture of evolutionists, the invalidity of their claims and the dark liaisons between Darwinism and bloody ideologies such as fascism and communism.

His pen-name is made up of the names "Harun" (Aaron) and "Yahya" (John), in memory of the two esteemed prophets who fought against lack of faith. The Prophet's seal on the cover of the author's books has a symbolic meaning linked to their contents. This seal represents the Qur'an, the last Book and the last word of God, and our Prophet, the last of all the prophets. Under the guidance of the Qur'an and Sunnah, the author makes it his main goal to disprove each one of the fundamental tenets of godless ideologies and to have the "last word", so as to completely silence the objections raised against religion. The seal of the Prophet, who attained ultimate wisdom and moral perfection, is used as a sign of his intention of saying this last word.

All these works by the author centre around one goal: to convey the message of the Qur'an to people, thus encouraging them to think about basic faith-related issues, such as the existence of God, His unity and the hereafter, and to display the decrepit foundations and perverted works of godless systems.

Harun Yahya enjoys a wide readership in many countries, from India to America, England to Indonesia, Poland to Bosnia, and Spain to Brazil. Some of his books are available in English, French, German, Italian, Spanish, Portuguese, Urdu, Arabic, Albanian, Russian, Serbo-Croat (Bosnian), Polish, Malay, Uyghur Turkish, and Indonesian, and they have been enjoyed by readers all over the world.

Greatly appreciated all around the world, these works have been instrumental in many people putting their faith in God and in many others gaining a deeper insight into their faith. The wisdom, and the sincere and easy-to-understand style employed give these books a distinct touch which directly strikes any one who reads or examines them. Immune to objections, these works are characterised by their features of rapid effectiveness, definite results and irrefutability. It is unlikely that those who read these books and give a serious thought to them can any longer sincerely advocate the materialistic philosophy, atheism and any other perverted ideology or philosophy. Even if they continue to advocate, this will be only a sentimental insistence since these books have refuted these ideologies from their very basis. All contemporary movements of denial are ideologically defeated today, thanks to the collection of books written by Harun Yahya.

There is no doubt that these features result from the wisdom and lucidity of the Qur'an. The author certainly does not feel proud of himself; he merely intends to serve as a means in one's search for God's right path. Furthermore, no material gain is sought in the publication of these works.

Considering these facts, those who encourage people to read these books, which open the "eyes" of the heart and guide them in becoming more devoted servants of God, render an invaluable service.

Meanwhile, it would just be a waste of time and energy to propagate other books which create confusion in peoples' minds, lead man into ideological chaos, and which, clearly have no strong and precise effects in removing the doubts in peoples' hearts, as also verified from previous experience. It is apparent that it is impossible for books devised to emphasize the author's literary power rather than the noble goal of saving people from loss of faith, to have such a great effect. Those who doubt this can readily see that the sole aim of Harun Yahya's books is to overcome disbelief and to disseminate the moral values of the Qur'an. The success, impact and sincerity this service has attained are manifest in the reader's conviction.

One point needs to be kept in mind: The main reason for the continuing cruelty and conflict, and all the ordeals the majority of people undergo is the ideological prevalence of disbelief. These

things can only come to an end with the ideological defeat of disbelief and by ensuring that everybody knows about the wonders of creation and Qur'anic morality, so that people can live by it. Considering the state of the world today, which forces people into the downward spiral of violence, corruption and conflict, it is clear that this service has to be provided more speedily and effectively. Otherwise, it may be too late.

It is no exaggeration to say that the collection of books by Harun Yahya have assumed this leading role. By the Will of God, these books will be the means through which people in the 21st century will attain the peace and bliss, justice and happiness promised in the Qur'an.

The works of the author include *The New Masonic Order, Judaism and Freemasonry, Global Freemasonry, Islam Denounces Terrorism, Terrorism: The Ritual of the Devil, The Disasters Darwinism Brought to Humanity, Communism in Ambush, Fascism: The Bloody Ideology of Darwinism, The 'Secret Hand' in Bosnia, Behind the Scenes of The Holocaust, Behind the Scenes of Terrorism, Israel's Kurdish Card, The Oppression Policy of Communist China and Eastern Turkestan, Solution: The Values of the Qur'an, The Winter of Islam and Its Expected Spring, Articles 1-2-3, A Weapon of Satan: Romanticism, Signs from the Chapter of the Cave to the Last Times, Signs of the Last Day, The Last Times and The Beast of the Earth, Truths 1-2, The Western World Turns to God, The Evolution Deceit, Precise Answers to Evolutionists, The Blunders of Evolutionists, Confessions of Evolutionists, The Qur'an Denies Darwinism, Perished Nations, For Men of Understanding, The Prophet Musa, The Prophet Yusuf, The Prophet Muhammad (saas), The Prophet Sulayman, The Golden Age, Allah's Artistry in Colour, Glory is Everywhere, The Importance of the Evidences of Creation, The Truth of the Life of This World, The Nightmare of Disbelief, Knowing the Truth, Eternity Has Already Begun, Timelessness and the Reality of Fate, Matter: Another Name for Illusion, The Little Man in the Tower, Islam and the Philosophy of Karma, The Dark Magic of Darwinism, The Religion of Darwinism, The Collapse of the Theory of Evolution in 20 Questions, Allah is Known Through Reason, The Qur'an Leads the Way to Science, The Real Origin of Life, Consciousness in the Cell, A String of Miracles, The Creation of the Universe, Miracles of the Qur'an, The Design in Nature, Self-Sacrifice and Intelligent Behaviour Models in Animals, The End of Darwinism, Deep Thinking, Never Plead Ignorance, The Green Miracle: Photosynthesis, The Miracle in the Cell, The Miracle in the Eye, The Miracle in the Spider, The Miracle in the Gnat, The Miracle in the Ant, The Miracle of the Immune System, The Miracle of Creation in Plants, The Miracle in the Atom, The Miracle in the Honeybee, The Miracle of Seed, The Miracle of Hormone, The Miracle of the Termite, The Miracle of the Human Body, The Miracle of Man's Creation, The Miracle of Protein, The Miracle of Smell and Taste, The Secrets of DNA.*

The author's childrens books are: *Wonders of Allah's Creation, The World of Animals, The Splendour in the Skies, Wonderful Creatures, Let's Learn Our Islam, The World of Our Little Friends: The Ants, Honeybees That Build Perfect Combs, Skillful Dam Builders: Beavers.*

The author's other works on Quranic topics include: *The Basic Concepts in the Qur'an, The Moral Values of the Qur'an, Quick Grasp of Faith 1-2-3, Ever Thought About the Truth?, Crude Understanding of Disbelief, Devoted to Allah, Abandoning the Society of Ignorance, The Real Home of Believers: Paradise, Knowledge of the Qur'an, Qur'an Index, Emigrating for the Cause of Allah, The Character of the Hypocrite in the Qur'an, The Secrets of the Hypocrite, The Names of Allah, Communicating the Message and Disputing in the Qur'an, Answers from the Qur'an, Death Resurrection Hell, The Struggle of the Messengers, The Avowed Enemy of Man: Satan, The Greatest Slander: Idolatry, The Religion of the Ignorant, The Arrogance of Satan, Prayer in the Qur'an, The Theory of Evolution, The Importance of Conscience in the Qur'an, The Day of Resurrection, Never Forget, Disregarded Judgements of the Qur'an, Human Characters in the Society of Ignorance, The Importance of Patience in the Qur'an, General Information from the Qur'an, The Mature Faith, Before You Regret, Our Messengers Say, The Mercy of Believers, The Fear of Allah, Jesus Will Return, Beauties Presented by the Qur'an for Life, A Bouquet of the Beauties of Allah 1-2-3-4, The Iniquity Called "Mockery," The Mystery of the Test, The True Wisdom According to the Qur'an, The Struggle with the Religion of Irreligion, The School of Yusuf, The Alliance of the Good, Slanders Spread Against Muslims Throughout History, The Importance of Following the Good Word, Why Do You Deceive Yourself?, Islam: The Religion of Ease, Enthusiasm and Excitement in the Qur'an, Seeing Good in Everything, How do the Unwise Interpret the Qur'an?, Some Secrets of the Qur'an, The Courage of Believers, Being Hopeful in the Qur'an, Justice and Tolerance in the Qur'an, Basic Tenets of Islam, Those Who do not Listen to the Qur'an, Taking the Qur'an as a Guide, A Lurking Threat: Heedlessness, Sincerity in the Qur'an.*

## TO THE READER

In all the books by the author, faith-related issues are explained in the light of Qur'anic verses, and people are invited to learn God's words and to live by them. All the subjects that concern God's verses are explained in such a way as to leave no room for doubt or question marks in the reader's mind. The sincere, plain and fluent style employed ensures that everyone of every age and from every social group can easily understand the books. This effective and lucid narrative makes it possible to read them in a single sitting. Even those who rigorously reject spirituality are influenced by the facts recounted in these books and cannot refute the truthfulness of their contents.

This book and all the other works by Harun Yahya can be read individually or discussed in a group. Those readers who are willing to profit from the books will find discussion very useful in that they will be able to relate their own reflections and experiences to one another.

In addition, it is a great service to the religion to contribute to the presentation and circulation of these books, which are written solely for the good pleasure of God. All the books of the author are extremely convincing, so, for those who want to communicate the religion to other people, one of the most effective methods is to encourage them to read these books.

It is hoped that the reader will take time to look through the review of other books on the final pages of the book, and appreciate the rich source of material on faith-related issues, which are very useful and a pleasure to read.

In them, one will not find, as in some other books, the personal views of the author, explanations based on dubious sources, styles unobservant of the respect and reverence due to sacred subjects, or hopeless, doubt-creating, and pessimistic accounts that create deviations in the heart.

# DARWINISM REFUTED

How the Theory of Evolution  
Breaks Down in the Light of  
Modern Science

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# Contents

<b>FOREWORD</b> .....	11
<b>A SHORT HISTORY</b> .....	12
The Birth of Darwinism .....	13
The Problem of The Origin of Life .....	14
The Problem of Genetics .....	15
The Efforts of Neo-Darwinism .....	17
A Theory in Crisis .....	19
<b>THE MECHANISMS OF DARWINISM</b> .....	20
Natural Selection .....	21
A Struggle for Survival? .....	21
Observation and Experiments .....	23
The True Story of Industrial Mechanism .....	23
Why Natural Selection Cannot Explain Complexity .....	26
Mutations .....	27
The Pleiotropic Effect .....	31
<b>THE TRUE ORIGIN OF SPECIES</b> .....	35
The Meaning of Variations .....	35
Confessions About "Microevolution" .....	38
The Origin of Species in the Fossil Record .....	40
The Question of Transitional Forms and Stasis .....	43
The Adequacy of the Fossil Record .....	45
The Truth Revealed by the Fossil Record .....	48
<b>TRUE NATURAL HISTORY -I-</b> <b>(FROM INTERVERTEBRATES TO REPTILES)</b> .....	50
The Classification of Living Things .....	50
Fossils Reject the "Tree of Life" .....	52
The Burgess Shale Fossils .....	57
Molecular Comparisons Deepen Evolution's Cambrian Impasse .....	59
Trilobites vs. Darwin .....	60
The Origin of Vertebrates .....	63
The Origin of Tetrapods .....	68
Speculations About <i>Cœlacanth</i> .....	72
Physical Obstacles to Transition from Water to Land .....	74
The Origin of Reptiles .....	78
Snakes and Turtles .....	81
Flying Reptiles .....	82
Marine Reptiles .....	85

## DARWINISM REFUTED

<b>TRUE NATURAL HISTORY -II- (BIRDS AND MAMMALS)</b> .....	87
The Origin of Flight According to Evolutionists .....	87
Birds and Dinosaur .....	89
The Unique Structure of Avian Lungs .....	92
Bird Feathers and Reptile Scales .....	97
The Design of Feathers .....	98
The <i>Archaeopteryx</i> Misconception .....	100
The Teeth and Claws of <i>Archaeopteryx</i> .....	102
<i>Archaeopteryx</i> and Other Ancient Bird Fossils .....	105
<i>Archaeoraptor</i> : The Dino-Bird Hoax .....	106
The Origin of Insects .....	111
The Origin of Mammals .....	113
The Myth of Horse Evolution .....	117
The Origin of Bats .....	120
The Origin of Marine Mammals .....	122
The Myth of the Walking Whale .....	123
Problems With Superficial Sequences .....	127
The Surprisingly Lamarckian Superstitions of Evolutionists .....	128
The Unique Structures of Marine Mammals .....	130
The Marine Mammal Scenario Itself .....	133
Conclusion .....	134
<b>THE INVALIDITY OF PUNCTUATED EQUILIBRIUM</b> .....	139
The Mechanism of Punctuated Equilibrium .....	141
The Misconception About Macromutations .....	141
The Misconception About Restricted Populations .....	144
Conclusion .....	145
<b>THE ORIGIN OF MAN</b> .....	147
The Imaginary Family Tree of Man .....	149
<i>Australopithecus</i> .....	150
<i>Homo habilis</i> .....	154
The Misconception about <i>Homo rudolfensis</i> .....	156
<i>Homo erectus</i> .....	159
<i>Neanderthals</i> : Their Anatomy and Culture .....	164
<i>Archaic Homo sapiens</i> , <i>Homo heidelbergensis</i> and <i>Cro-Magnon Man</i> .....	169
The Collapse of the Family Tree .....	170
Latest Evidence: <i>Sahelanthropus tchadensis</i> and The Missing Link That Never Was .....	172
The Secret History of <i>Homo sapiens</i> .....	173
Huts and Footprints .....	175
The Bipedalism Problem .....	180
Evolution: An Unscientific Faith .....	182
Deceptive Reconstructions .....	183
The Piltdown Man Scandal .....	185

*Contents*

The Nebraska Man Scandal . . . . .	187
Conclusion . . . . .	188
<b>MOLECULAR BIOLOGY AND THE ORIGIN OF LIFE . . . . .</b>	<b>189</b>
An Example of the Logic of "Chance" . . . . .	190
The Complex Structure and Systems in the Cell. . . . .	192
The Problem of the Origin of Proteins . . . . .	195
Left-handed Proteins . . . . .	198
The Indispensability of the Peptide Link . . . . .	201
Zero Probability . . . . .	201
Is There a Trial-and-Error Mechanism in Nature? . . . . .	203
The Evolutionary Argument about the Origin of Life . . . . .	205
Miller's Experiment . . . . .	207
Four Facts That Invalidate Miller's Experiment . . . . .	208
The Primordial Atmosphere and Proteins . . . . .	212
The Problem of Protein Synthesis in Water . . . . .	213
Fox's Experiment . . . . .	214
The Origin of the DNA Molecule. . . . .	216
DNA Cannot Be Explained by Non-Design. . . . .	217
The Invalidity of the RNA World . . . . .	221
Can Design Be Explained by Coincidence? . . . . .	224
<b>THE MYTH OF HOMOLOGY . . . . .</b>	<b>228</b>
The Invalidity of Morphological Homology . . . . .	229
The Genetic and Embryological Impasse of Homology . . . . .	233
The Fall of the Homology in Tetrapod Limbs . . . . .	235
The Invalidity of Molecular Homology . . . . .	237
The "Tree of Life" is Collapsing. . . . .	243
<b>IMMUNITY, "VESTIGIAL ORGANS" AND EMBRYOLOGY . . . . .</b>	<b>246</b>
Bacterial Resistance to Antibiotics . . . . .	246
The Myth of Vestigial Organs . . . . .	250
Yet Another Blow To "Vestigial Organs": The Leg of the Horse. . . . .	253
The Recapitulation Misconception . . . . .	254
<b>THE ORIGIN OF PLANTS . . . . .</b>	<b>259</b>
The Origin of the Plant Cell . . . . .	259
The Endosymbiosis Hypothesis and Its Invalidity . . . . .	263
The Origin of Photosynthesis . . . . .	265
The Origin of Algae . . . . .	267
The Origin of Angiosperms. . . . .	271
<b>IRREDUCIBLE COMPLEXITY. . . . .</b>	<b>273</b>
The Bacterial Flagellum . . . . .	275
The Design of the Human Eye . . . . .	277

## DARWINISM REFUTED

The Irreducible Structure of the "Primitive" Eye . . . . .	279
The Chemistry of Sight . . . . .	280
The Lobster Eye . . . . .	282
The Design in the Ear . . . . .	285
The Inner Ear . . . . .	287
The Origin of the Ear According to Evolutionists . . . . .	289
The Reproduction of <i>Rheobatrachus Silus</i> . . . . .	292
Conclusion . . . . .	293
<b>EVOLUTION AND THERMODYNAMICS . . . . .</b>	<b>294</b>
The Misconception About Open Systems . . . . .	297
Ilya Prigogine and the Myth of the "Self-Organization of Matter" . . . . .	298
The Difference Between Organized and Ordered Systems . . . . .	301
Self Organization: A Materialist Dogma . . . . .	304
<b>INFORMATION THEORY AND THE END OF MATERIALISM . . . . .</b>	<b>306</b>
The Difference between Matter and Information . . . . .	307
The Origin of the Information in Nature . . . . .	309
Materialist Admissions . . . . .	310
<b>DISTINGUISHING BETWEEN SCIENCE AND MATERIALISM . . . . .</b>	<b>311</b>
The Definition of the "Scientific Cause" . . . . .	314
Coming to Terms with the Shocks . . . . .	316
<b>CONCLUSION . . . . .</b>	<b>317</b>
Man's Duty . . . . .	318
<b>THE SECRET BEYOND MATTER . . . . .</b>	<b>321</b>
The Long Discussed Question: What is the Real Nature of Matter? . . . . .	321
We Live in a Universe Presented to Us by Our Perceptions . . . . .	324
How Do Our Sense Organs Work? . . . . .	326
Do We Spend Our Entire Life in Our Brains? . . . . .	330
Is the Existence of the "External World" Indispensable? . . . . .	333
Who is the Perceiver? . . . . .	335
The Real Absolute Being . . . . .	338
Conclusion . . . . .	341
<b>TIMELESSNESS AND THE REALITY OF FATE . . . . .</b>	<b>343</b>
The Perception of Time . . . . .	343
The Scientific Explanation of Timelessness . . . . .	344
Relativity in the Qur'an . . . . .	347
Destiny . . . . .	349
<b>NOTES . . . . .</b>	<b>352</b>
<b>INDEX . . . . .</b>	<b>369</b>



# FOREWORD

Anyone who seeks an answer to the question of how living things, including himself, came into existence, will encounter two distinct explanations. The first is "creation," the idea that all living things came into existence as a consequence of an intelligent design. The second explanation is the theory of "evolution," which asserts that living things are not the products of an intelligent design, but of coincidental causes and natural processes.

For a century and a half now, the theory of evolution has received extensive support from the scientific community. The science of biology is defined in terms of evolutionist concepts. That is why, between the two explanations of creation and evolution, the majority of people assume the evolutionist explanation to be scientific. Accordingly, they believe evolution to be a theory supported by the observational findings of science, while creation is thought to be a belief based on faith. As a matter of fact, however, scientific findings do not support the theory of evolution. Findings from the last two decades in particular openly contradict the basic assumptions of this theory. Many branches of science, such as paleontology, biochemistry, population genetics, comparative anatomy and biophysics, indicate that natural processes and coincidental effects cannot explain life, as the theory of evolution proposes.

In this book, we will analyze this scientific crisis faced by the theory of evolution. This work rests solely upon scientific findings. Those advocating the theory of evolution on behalf of scientific truth should confront these findings and question the presumptions they have so far held. Refusal to do this would mean openly accepting that their adherence to the theory of evolution is dogmatic rather than scientific.

# A SHORT HISTORY

Despite having its roots in ancient Greece, the theory of evolution was first brought to the attention of the scientific world in the nineteenth century. The most thoroughly considered view of evolution was expressed by the French biologist Jean-Baptiste Lamarck, in his *Zoological Philosophy* (1809). Lamarck thought that all living things were endowed with a vital force that drove them to evolve toward greater complexity. He also thought that organisms could pass on to their offspring traits acquired during their lifetimes. As an example of this line of reasoning, Lamarck suggested that the long neck of the giraffe evolved when a short-necked ancestor took to browsing on the leaves of trees instead of on grass.

This evolutionary model of Lamarck's was invalidated by the discovery of the laws of genetic inheritance. In the middle of the twentieth century, the discovery of the structure of DNA revealed that the nuclei of the cells of living organisms possess very special genetic information, and that this information could not be altered by "acquired traits." In other words, during its lifetime, even though a giraffe managed to make its neck a few centimeters longer by extending its neck to upper branches, this trait would not pass to its offspring. In brief, the Lamarckian view was simply refuted by scientific findings, and went down in history as a flawed assumption.

However, the evolutionary theory formulated by another natural scientist who lived a couple of generations after Lamarck proved to be more influential. This natural scientist was Charles Robert Darwin, and the theory he formulated is known as "Darwinism."



Jean-B. Lamarck

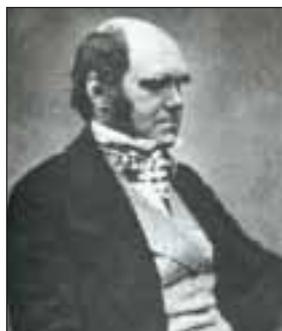
## **The Birth of Darwinism**

Charles Darwin based his theory on various observations he made as a young naturalist on board the *H.M.S Beagle*, which sailed in late 1831 on a five-year official voyage around the world. Young Darwin was heavily influenced by the diversity of species he observed, especially of the different Galapagos Island finches. The differences in the beaks of these birds, Darwin thought, were a result of their adaptation to their different environments.

After this voyage, Darwin started to visit animal markets in England. He observed that breeders produced new breeds of cow by mating animals with different characteristics. This experience, together with the different finch species he observed in the Galapagos Islands, contributed to the formulation of his theory. In 1859, he published his views in his book *The Origin of Species*. In this book, he postulated that all species had descended from a single ancestor, evolving from one another over time by slight variations.

What made Darwin's theory different from Lamarck's was his emphasis on "natural selection." Darwin theorized that there is a struggle for survival in nature, and that natural selection is the survival of strong species, which can adapt to their environment. Darwin adopted the following line of reasoning:

Within a particular species, there are natural and coincidental variations. For instance some cows are bigger than others, while some have darker colors. Natural selection selects the favorable traits. The process of natural selection thus causes an increase of favorable genes within a population, which results in the features of that population being better adapted to local conditions. Over time these changes may be



**Charles Darwin developed his theory when science was still in a primitive state. Under primitive microscopes like these, life appeared to have a very simple structure. This error formed the basis of Darwinism.**



significant enough to cause a new species to arise.

However, this "theory of evolution by natural selection" gave rise to doubts from the very first:

1- What were the "natural and coincidental variations" referred to by Darwin? It was true that some cows were bigger than others, while some had darker colors, yet how could these variations provide an explanation for the diversity in animal and plant species?

2- Darwin asserted that "Living beings evolved gradually." In this case, there should have lived millions of "transitional forms." Yet there was no trace of these theoretical creatures in the fossil record. Darwin gave considerable thought to this problem, and eventually arrived at the conclusion that "further research would provide these fossils."

3- How could natural selection explain complex organs, such as eyes, ears or wings? How can it be advocated that these organs evolved gradually, bearing in mind that they would fail to function if they had even a single part missing?

4- Before considering these questions, consider the following: How did the first organism, the so-called ancestor of all species according to Darwin, come into existence? Could natural processes give life to something which was originally inanimate?

Darwin was, at least, aware of some these questions, as can be seen from the chapter "Difficulties of the Theory." However, the answers he provided had no scientific validity. H.S. Lipson, a British physicist, makes the following comments about these "difficulties" of Darwin's:

On reading *The Origin of Species*, I found that Darwin was much less sure himself than he is often represented to be; the chapter entitled "Difficulties of the Theory" for example, shows considerable self-doubt. As a physicist, I was particularly intrigued by his comments on how the eye would have arisen.<sup>1</sup>

Darwin invested all his hopes in advanced scientific research, which he expected to dispel the "difficulties of the theory." However, contrary to his expectations, more recent scientific findings have merely increased these difficulties.

## **The Problem of the Origin of Life**

In his book, Darwin never mentioned the origin of life. The primitive understanding of science in his time rested on the assumption that living

things had very simple structures. Since mediaeval times, spontaneous generation, the theory that non-living matter could come together to form living organisms, had been widely accepted. It was believed that insects came into existence from leftover bits of food. It was further imagined that mice came into being from wheat. Interesting experiments were conducted to prove this theory. Some wheat was placed on a dirty piece of cloth, and it was believed that mice would emerge in due course.

Similarly, the fact that maggots appeared in meat was believed to be evidence for spontaneous generation. However, it was only realized some time later that maggots did not appear in meat spontaneously, but were carried by flies in the form of larvae, invisible to the naked eye.

Even in the period when Darwin's *Origin of Species* was written, the belief that bacteria could come into existence from inanimate matter was widespread.

However, five years after the publication of Darwin's book, Louis Pasteur announced his results after long studies and experiments, which disproved spontaneous generation, a cornerstone of Darwin's theory. In his triumphal lecture at the Sorbonne in 1864, Pasteur said, "Never will the doctrine of spontaneous generation recover from the mortal blow struck by this simple experiment."<sup>2</sup>

Advocates of the theory of evolution refused to accept Pasteur's findings for a long time. However, as scientific progress revealed the complex structure of the cell, the idea that life could come into being coincidentally faced an even greater impasse. We shall consider this subject in some detail in this book.

## **The Problem of Genetics**

Another subject that posed a quandary for Darwin's theory was inheritance. At the time when Darwin developed his theory, the question of how living beings transmitted their traits to other generations—that is, how inheritance took place—was not completely understood. That is why



**Louis Pasteur destroyed the belief that life could be created from inanimate substances.**

the naive belief that inheritance was transmitted through blood was commonly accepted.

Vague beliefs about inheritance led Darwin to base his theory on completely false grounds. Darwin assumed that natural selection was the "mechanism of evolution." Yet one question remained unanswered: How would these "useful traits" be selected and transmitted from one generation to the next? At this point, Darwin embraced the Lamarckian theory, that is, "the inheritance of acquired traits." In his book *The Great Evolution Mystery*, Gordon R. Taylor, a researcher advocating the theory of evolution, expresses the view that Darwin was heavily influenced by Lamarck:

Lamarckism... is known as the inheritance of acquired characteristics... Darwin himself, as a matter of fact, was inclined to believe that such inheritance occurred and cited the reported case of a man who had lost his fingers and bred sons without fingers... [Darwin] had not, he said, gained a single idea from Lamarck. This was doubly ironical, for Darwin repeatedly toyed with the idea of the inheritance of acquired characteristics and, if it is so dreadful, it is Darwin who should be denigrated rather than Lamarck... In the 1859 edition of his work, Darwin refers to 'changes of external conditions' causing variation but subsequently these conditions are described as directing variation and cooperating with natural selection in directing it... Every year he attributed more and more to the agency of use or disuse... By 1868 when he published *Varieties of Animals and Plants under Domestication* he gave a whole series of examples of supposed Lamarckian inheritance: such as a man losing part of his little finger and all his sons being born with deformed little fingers, and boys born with foreskins much reduced in length as a result of generations of circumcision.<sup>3</sup>

However, Lamarck's thesis, as we have seen above, was disproved by the laws of genetic inheritance discovered by the Austrian monk and botanist, Gregor Mendel. The concept of "useful traits" was therefore left unsupported. Genetic laws showed that acquired traits are not passed on, and that genetic inheritance takes place according to certain unchanging laws. These laws supported the view that species remain unchanged. No matter how much the cows that Darwin saw in England's animal fairs bred, the species itself would never change: cows would always remain cows.

Gregor Mendel announced the laws of genetic inheritance that he discovered as a result of long experiment and observation in a scientific

paper published in 1865. But this paper only attracted the attention of the scientific world towards the end of the century. By the beginning of the twentieth century, the truth of these laws had been accepted by the whole scientific community. This was a serious dead-end for Darwin's theory, which tried to base the concept of "useful traits" on Lamarck.

Here we must correct a general misapprehension: Mendel opposed not only Lamarck's model of evolution, but also Darwin's. As the article "Mendel's Opposition to Evolution and to Darwin," published in the *Journal of Heredity*, makes clear, "he [Mendel] was familiar with *The Origin of Species* ...and he was opposed to Darwin's theory; Darwin was arguing for descent with modification through natural selection, Mendel was in favor of the orthodox doctrine of special creation."<sup>4</sup>

The laws discovered by Mendel put Darwinism in a very difficult position. For these reasons, scientists who supported Darwinism tried to develop a different model of evolution in the first quarter of the twentieth century. Thus was born "neo-Darwinism."

### **The Efforts of Neo-Darwinism**

A group of scientists who were determined to reconcile Darwinism with the science of genetics, in one way or another, came together at a meeting organized by the Geological Society of America in 1941. After long discussion, they agreed on ways to create a new interpretation of Darwinism and over the next few years, specialists produced a synthesis of their fields into a revised theory of evolution.

The scientists who participated in establishing the new theory included the geneticists G. Ledyard Stebbins and Theodosius Dobzhansky, the zoologists Ernst Mayr and Julian Huxley, the paleontologists George Gaylord Simpson and Glenn L. Jepsen, and the mathematical geneticists Sir Ronald A. Fisher and Sewall Wright.<sup>5</sup>

To counter the fact of "genetic stability" (genetic homeostasis), this group of scientists employed the concept of "mutation," which had been proposed by the Dutch botanist Hugo de Vries at the beginning of the 20th



**The genetic laws discovered by Mendel proved very damaging to the theory of evolution.**



The architects of Neo-Darwinism: Ernst Mayr, Theodosius Dobzhansky, and Julian Huxley.

century. Mutations were defects that occurred, for unknown reasons, in the inheritance mechanism of living things. Organisms undergoing mutation developed some unusual structures, which deviated from the genetic information they inherited from their parents. The concept of "**random mutation**" was supposed to provide the answer to **the question of the origin of the advantageous variations which caused living organisms to evolve** according to Darwin's theory—a phenomenon that Darwin himself was unable to explain, but simply tried to side-step by referring to Lamarck. The Geological Society of America group named this new theory, which was formulated by adding the concept of mutation to Darwin's natural selection thesis, the "**synthetic theory of evolution**" or the "**modern synthesis**." In a short time, this theory came to be known as "**neo-Darwinism**" and its supporters as "**neo-Darwinists**."

Yet there was a serious problem: It was true that mutations changed the genetic data of living organisms, yet this change always occurred to the detriment of the living thing concerned. All observed mutations ended up with disfigured, weak, or diseased individuals and, sometimes, led to the death of the organism. Hence, in an attempt to find examples of "useful mutations" which improve the genetic data in living organisms, neo-Darwinists conducted many experiments and observations. For decades, they conducted mutation experiments on fruit flies and various other species. However, in none of these experiments could a mutation which improved the genetic data in a living being be seen.

Today the issue of mutation is still a great impasse for Darwinism. Despite the fact that the theory of natural selection considers mutations to be the unique source of "useful changes," no mutations of any kind have been observed that are actually useful (that is, that improve the genetic information). In the following chapter, we will consider this issue in detail.

Another impasse for neo-Darwinists came from **the fossil record**. Even in Darwin's time, fossils were already posing an important obstacle to the theory. While Darwin himself accepted the lack of fossils of "intermediate species," he also predicted that further research would provide evidence of these lost transitional forms. However, despite all the paleontologists' efforts, the fossil record continued to remain a serious obstacle to the theory. One by one, concepts such as "vestigial organs," "embryological recapitulation" and "homology" lost all significance in the light of new scientific findings. All these issues are dealt with more fully in the remaining chapters of this book.

### **A Theory in Crisis**

We have just reviewed in summary form the impasse Darwinism found itself in from the day it was first proposed. We will now start to analyze the enormous dimensions of this deadlock. In doing this, our intention is to show that the theory of evolution is not indisputable scientific truth, as many people assume or try to impose on others. On the contrary, there is a glaring contradiction when the theory of evolution is compared to scientific findings in such diverse fields as the origin of life, population genetics, comparative anatomy, paleontology, and biochemistry. In a word, evolution is a theory in "crisis."

That is a description by Prof. Michael Denton, an Australian biochemist and a renowned critic of Darwinism. In his book *Evolution: A Theory in Crisis* (1985), Denton examined the theory in the light of different branches of science, and concluded that the theory of natural selection is very far from providing an explanation for life on earth.<sup>6</sup> Denton's intention in offering his criticism was not to show the correctness of another view, but only to compare Darwinism with the scientific facts. During the last two decades, many other scientists have published significant works questioning the validity of Darwin's theory of evolution.

In this book, we will examine this crisis. No matter how much concrete evidence is provided, some readers may be unwilling to abandon their positions, and will continue to adhere to the theory of evolution. However, reading this book will still be of use to them, since it will help them to see the real situation of the theory they believe in, in the light of scientific findings.

# THE MECHANISMS OF DARWINISM

According to the theory of evolution, living things came into existence by means of coincidences, and developed further as a consequence of coincidental effects. Approximately 3.8 billion years ago, when no living organisms existed on earth, the first simple single-celled organisms (prokaryotes) emerged. Over time, more complex cells (eukaryotes) and multicellular organisms came into being. In other words, according to Darwinism, the forces of nature built simple inanimate elements into highly complex and flawless designs.

In evaluating this claim, one should first consider whether such forces in fact exist in nature. More explicitly, are there really natural mechanisms which can accomplish evolution according to the Darwinian scenario?

The neo-Darwinist model, which we shall take as the mainstream theory of evolution today, argues that life has evolved through two natural mechanisms: natural selection and mutation. The theory basically asserts that natural selection and mutation are two complementary mechanisms. The origin of evolutionary modifications lies in random mutations that take place in the genetic structures of living things. The traits brought about by mutations are selected by the mechanism of natural selection, and by this means living things evolve. However, when we look further into this theory, we find that there is no such evolutionary mechanism. Neither natural selection nor mutations can cause different species to evolve into one another, and the claim that they can is completely unfounded.

## **Natural Selection**

The concept of natural selection was the basis of Darwinism. This assertion is stressed even in the title of the book in which Darwin proposed his theory: *The Origin of Species, by means of Natural Selection...*

Natural selection is based on the assumption that in nature there is a constant struggle for survival. It favors organisms with traits that best enable them to cope with pressures exerted by the environment. At the end of this struggle, the strongest ones, the ones most suited to natural conditions, survive. For example, in a herd of deer under threat from predators, those individuals that can run fastest will naturally survive. As a consequence, the herd of deer will eventually consist of only fast-running individuals.

However, no matter how long this process goes on, it will not transform those deer into another species. The weak deer are eliminated, the strong survive, but, since no alteration in their genetic data takes place, no transformation of a species occurs. Despite the continuous processes of selection, deer continue to exist as deer.

The deer example is true for all species. In any population, natural selection only eliminates those weak, or unsuited individuals who are unable to adapt to the natural conditions in their habitat. It does not produce new species, new genetic information, or new organs. That is, it cannot cause anything to evolve. Darwin, too, accepted this fact, stating that "**Natural selection can do nothing until favourable individual differences or variations occur.**"<sup>7</sup> That is why neo-Darwinism had to add the mutation mechanism as a factor altering genetic information to the concept of natural selection.

We will deal with mutations next. But before proceeding, we need to further examine the concept of natural selection in order to see the contradictions inherent in it.

## **A Struggle for Survival?**

The essential assumption of the theory of natural selection holds that there is a fierce struggle for survival in nature, and every living thing cares only for itself. At the time Darwin proposed this theory, the ideas of Thomas Malthus, the British classical economist, were an important

influence on him. Malthus maintained that human beings were inevitably in a constant struggle for survival, basing his views on the fact that population, and hence the need for food resources, increases geometrically, while food resources themselves increase only arithmetically. The result is that population size is inevitably checked by factors in the environment, such as hunger and disease. Darwin adapted Malthus's vision of a fierce struggle for survival among human beings to nature at large, and claimed that "natural selection" is a consequence of this struggle.

Further research, however, revealed that there was no struggle for life in nature as Darwin had postulated. As a result of extensive research into animal groups in the 1960s and 1970s, V. C. Wynne-Edwards, a British zoologist, concluded that living things balance their population in an interesting way, which prevents competition for food. Animal groups were simply managing their population on the basis of their food resources. Population was regulated not by elimination of the weak through factors like epidemics or starvation, but by instinctive control mechanisms. In other words, animals controlled their numbers not by fierce competition, as Darwin suggested, but by limiting reproduction.<sup>8</sup>

Even plants exhibited examples of population control, which invalidated Darwin's suggestion of selection by means of competition. The botanist A. D. Bradshaw's observations indicated that during reproduction, plants behaved according to the "density" of the planting, and limited their reproduction if the area was highly populated with plants.<sup>9</sup> On the other hand, examples of sacrifice observed in animals such as ants and bees display a model completely opposed to the Darwinist struggle for survival.

In recent years, research has revealed findings regarding self-sacrifice even in bacteria. These living things without brains or nervous systems, totally devoid of any capacity for thought, kill themselves to save other bacteria when they are invaded by viruses.<sup>10</sup>

These examples surely invalidate the basic assumption of natural selection—the absolute struggle for survival. It is true that there is



**Darwin had been influenced by Thomas Malthus when he developed his thesis of the struggle for life. But observations and experiments proved Malthus wrong.**

competition in nature; however, there are clear models of self-sacrifice and solidarity, as well.

## **Observation and Experiments**

Apart from the theoretical weaknesses mentioned above, the theory of evolution by natural selection comes up against a fundamental impasse when faced with concrete scientific findings. The scientific value of a theory must be assessed according to its success or failure in experiment and observation. Evolution by natural selection fails on both counts.

Since Darwin's time, there has not been a single shred of evidence put forward to show that natural selection causes living things to evolve. Colin Patterson, the senior paleontologist at the British Museum of Natural History in London and a prominent evolutionist, stresses that natural selection has never been observed to have the ability to cause things to evolve:

**No one has ever produced a species by the mechanisms of natural selection.** No one has ever got near it, and most of the current argument in neo-Darwinism is about this question.<sup>11</sup>

Pierre-Paul Grassé, a well-known French zoologist and critic of Darwinism, has these words to say in "Evolution and Natural Selection," a chapter of his book *The Evolution of Living Organisms*.

The "evolution in action" of J. Huxley and other biologists is simply the observation of demographic facts, local fluctuations of genotypes, geographical distributions. Often the species concerned have remained practically unchanged for hundreds of centuries! Fluctuation as a result of circumstances, with prior modification of the genome, does not imply evolution, and we have tangible proof of this in many panchronic species [i.e. living fossils that remain unchanged for millions of years].<sup>12</sup>

A close look at a few "observed examples of natural selection" presented by biologists who advocate the theory of evolution, would reveal that, in reality, they do not provide any evidence for evolution.

## **The True Story of Industrial Melanism**

When evolutionist sources are examined, one inevitably sees that the example of moths in England during the Industrial Revolution is cited as



The top picture shows trees with moths on them before the Industrial Revolution, and the bottom picture shows them at a later date. Because the trees had grown darker, birds were able to catch light-colored moths more easily and their numbers decreased. However, this is not an example of "evolution," because no new species emerged; all that happened was that the ratio of the two already existing types in an already existing species changed.

an example of evolution by natural selection. This is put forward as the most concrete example of evolution observed, in textbooks, magazines, and even academic sources. In actuality, though, that example has nothing to do with evolution at all.

Let us first recall what is actually said: According to this account, around the onset of the Industrial Revolution in England, the color of tree barks around Manchester was quite light. Because of this, dark-colored moths resting on those trees could easily be noticed by the birds that fed on them, and therefore they had very little chance of survival. Fifty years later, in woodlands where industrial pollution has killed the lichens, the bark of the trees had darkened, and now the light-colored moths became the most hunted, since they were the most easily noticed. As a result, the proportion of light-colored to dark-colored moths decreased. Evolutionists believe this to be a great piece of evidence for their theory. They take refuge and solace in window-dressing, showing how light-colored moths "evolved" into dark-colored ones.

However, although we believe these facts to be correct, it should be quite clear that they can in no way be used as evidence for the theory of evolution, since no new form arose that had not existed before. Dark colored moths had existed in the moth population before the Industrial Revolution. Only the relative proportions of the existing moth varieties in the population changed. The moths had not acquired a new trait or organ, which would cause "speciation."<sup>13</sup> In order for one moth species to turn

into another living species, a bird for example, new additions would have had to be made to its genes. That is, an entirely separate genetic program would have had to be loaded so as to include information about the physical traits of the bird.

This is the answer to be given to the evolutionist story of Industrial Melanism. However, there is a more interesting side to the story: Not just its interpretation, but the story itself is flawed. As molecular biologist Jonathan Wells explains in his book *Icons of Evolution*, the story of the peppered moths, which is included in every evolutionary biology book and has therefore, become an "icon" in this sense, does not reflect the truth. Wells discusses in his book how Bernard Kettlewell's experiment, which is known as the "experimental proof" of the story, is actually a scientific scandal. Some basic elements of this scandal are:

- Many experiments conducted after Kettlewell's revealed that only one type of these moths rested on tree trunks, and all other types preferred to rest beneath small, horizontal branches. Since 1980 it has become clear that peppered moths do not normally rest on tree trunks. In 25 years of fieldwork, many scientists such as Cyril Clarke and Rory Howlett, Michael Majerus, Tony Liebert, and Paul Brakefield concluded that in Kettlewell's experiment, moths were forced to act atypically, therefore, the test results could not be accepted as scientific.<sup>14</sup>

- Scientists who tested Kettlewell's conclusions came up with an even more interesting result: Although the number of light moths would be expected to be larger in the less polluted regions of England, the dark moths there numbered four times as many as the light ones. This meant that there was no correlation between the moth population and the tree trunks as claimed by Kettlewell and repeated by almost all evolutionist sources.

- As the research deepened, the scandal changed dimension: "The moths on tree trunks" photographed by Kettlewell, were actually dead moths. Kettlewell used dead specimens glued or pinned to tree trunks and then photographed them. In truth, there was little chance of taking such a picture as the moths rested not on tree trunks but underneath the leaves.<sup>15</sup>

These facts were uncovered by the scientific community only in the late 1990s. The collapse of the myth of Industrial Melanism, which had been one of the most treasured subjects in "Introduction to Evolution"

courses in universities for decades, greatly disappointed evolutionists. One of them, Jerry Coyne, remarked:

My own reaction resembles the dismay attending my discovery, at the age of six, that it was my father and not Santa who brought the presents on Christmas Eve.<sup>16</sup>

Thus, "the most famous example of natural selection" was relegated to the trash-heap of history as a scientific scandal—which was inevitable, because natural selection is not an "evolutionary mechanism," contrary to what evolutionists claim.

In short, natural selection is capable neither of adding a new organ to a living organism, nor of removing one, nor of changing an organism of one species into that of another. The "greatest" evidence put forward since Darwin has been able to go no further than the "industrial melanism" of moths in England.

### **Why Natural Selection Cannot Explain Complexity**

As we showed at the beginning, the greatest problem for the theory of evolution by natural selection, is that it cannot enable new organs or traits to emerge in living things. Natural selection cannot develop a species' genetic data; therefore, it cannot be used to account for the emergence of new species. The greatest defender of the theory of punctuated equilibrium, Stephen Jay Gould, refer to this impasse of natural selection as follows;

The essence of Darwinism lies in a single phrase: natural selection is the creative force of evolutionary change. No one denies that selection will play a negative role in eliminating the unfit. Darwinian theories require that it create the fit as well.<sup>17</sup>

Another of the misleading methods that evolutionists employ on the issue of natural selection is their effort to present this mechanism as an intelligent designer. However, **natural selection** has no intelligence. It does not possess a will that can decide what is good and what is bad for living things. As a result, natural selection cannot explain biological systems and organs that possess the feature of "**irreducible complexity.**" These systems and organs are composed of a great number of parts

cooperating together, and are of no use if even one of these parts is missing or defective. (For example, the human eye does not function unless it exists with all its components intact).

Therefore, the will that brings all these parts together should be able to foresee the future and aim directly at the advantage that is to be acquired at the final stage. Since natural selection has no consciousness or will, it can do no such thing. This fact, which demolishes the foundations of the theory of evolution, also worried Darwin, who wrote: "**If it could be demonstrated that any complex organ existed, which could not possibly have been formed by numerous, successive, slight modifications, my theory would absolutely break down.**"<sup>18</sup>

## **Mutations**

Mutations are defined as breaks or replacements taking place in the DNA molecule, which is found in the nuclei of the cells of a living organism and which contains all its genetic information. These breaks or replacements are the result of external effects such as radiation or chemical action. Every mutation is an "accident," and either damages the nucleotides making up the DNA or changes their locations. Most of the time, they cause so much damage and modification that the cell cannot repair them.

Mutation, which evolutionists frequently hide behind, is not a magic wand that transforms living organisms into a more advanced and perfect form. The direct effect of mutations is harmful. The changes effected by mutations can only be like those experienced by people in Hiroshima, Nagasaki, and Chernobyl: that is, death, disability, and freaks of nature...

The reason for this is very simple: DNA has a very complex structure, and random effects can only damage it. Biologist B. G. Ranganathan states:

First, genuine mutations are very rare in nature. Secondly, most mutations are harmful since they are random, rather than orderly changes in the structure of genes; **any random change in a highly ordered system will be**



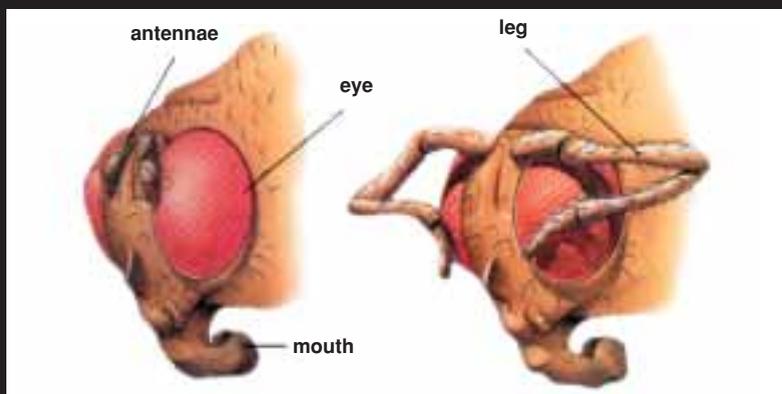
**A deformed foot, the product of mutation.**

**for the worse, not for the better.** For example, if an **earthquake** were to shake a highly ordered structure such as a building, there would be a random change in the framework of the building, which, in all probability, **would not be an improvement.**<sup>19</sup>

Not surprisingly, **no useful mutation has been so far observed.** All mutations have proved to be harmful. The evolutionist scientist Warren Weaver comments on the report prepared by the Committee on Genetic Effects of Atomic Radiation, which had been formed to investigate mutations that might have been caused by the nuclear weapons used in the Second World War:

Many will be puzzled about the statement that practically all known mutant genes are harmful. For mutations are a necessary part of the process of evolution. How can a good effect—evolution to higher forms of life—result from **mutations practically all of which are harmful?**<sup>20</sup>

Every effort put into "generating a useful mutation" has resulted in failure. For decades, evolutionists carried out many experiments to produce mutations in **fruit flies**, as these insects reproduce very rapidly and so mutations would show up quickly. Generation upon generation of these flies were mutated, yet no useful mutation was ever observed. The evolutionist geneticist Gordon Taylor writes thus:



Since the beginning of the twentieth century, evolutionary biologists have sought examples of useful mutations by creating mutant flies. But these efforts have always resulted in sick and deformed creatures. The top picture shows the head of a normal fruit fly, and the picture on the right shows the head of fruit fly with legs coming out of it, the result of mutation.



**Mutant frogs born with crippled legs.**

It is a striking, but not much mentioned fact that, though geneticists have been breeding fruit-flies for sixty years or more in labs all round the world—flies which produce a new generation every eleven days—they have never yet seen the emergence of a new species or even a new enzyme.<sup>21</sup>

Another researcher, Michael Pitman, comments on the failure of the experiments carried out on fruit flies:

Morgan, Goldschmidt, Muller, and other geneticists have subjected generations of fruit flies to extreme conditions of heat, cold, light, dark, and treatment by chemicals and radiation. All sorts of mutations, practically all trivial or positively deleterious, have been produced. Man-made evolution? Not really: Few of the geneticists' monsters could have survived outside the bottles they were bred in. In practice **mutants die, are**



**A mutant fly with deformed wings.**

sterile, or tend to revert to the wild type.<sup>22</sup>

The same holds true for man. All mutations that have been observed in human beings have had deleterious results. All mutations that take place in humans result in physical deformities, in infirmities such as **mongolism, Down syndrome, albinism, dwarfism** or **cancer**. Needless to say, a process that leaves people disabled or sick cannot be "an evolutionary mechanism"—evolution is supposed to produce forms that are better fitted to survive.

The American pathologist David A. Demick notes the following in a scientific article about mutations:

Literally thousands of human diseases associated with genetic mutations have been catalogued in recent years, with more being described continually. A recent reference book of medical genetics listed some 4,500 different genetic diseases. Some of the inherited syndromes characterized clinically in



The shape and functions of red corpuscles are compromised in sickle-cell anemia. For this reason, their oxygen-carrying capacities are weakened.

the days before molecular genetic analysis (such as Marfan's syndrome) are now being shown to be heterogeneous; that is, associated with many different mutations... With this array of human diseases that are caused by mutations, what of positive effects? With thousands of examples of harmful mutations readily available, surely it should be possible to describe some positive mutations if macroevolution is true. These would be needed not only for evolution to greater complexity, but also to offset the downward pull of the many harmful mutations. **But, when it comes to identifying positive mutations, evolutionary scientists are strangely silent.**<sup>23</sup>

The only instance evolutionary biologists give of "useful mutation" is the disease known as **sickle cell anemia**. In this, the hemoglobin molecule, which serves to carry oxygen in the blood, is damaged as a result of mutation, and undergoes a structural change. As a result of this, the hemoglobin molecule's ability to carry oxygen is seriously impaired. People with sickle cell anemia suffer increasing respiratory

difficulties for this reason. However, this example of mutation, which is discussed under blood disorders in medical textbooks, is strangely evaluated by some evolutionary biologists as a "useful mutation." They say that the partial immunity to malaria by those with the illness is a "gift" of evolution. Using the same logic, one could say that, since people born with genetic leg paralysis are unable to walk and so are saved from being killed in traffic accidents, therefore genetic leg paralysis is a "useful genetic feature." This logic is clearly totally unfounded.

It is obvious that mutations are solely a destructive mechanism. Pierre-Paul Grassé, former president of the French Academy of Sciences, is quite clear on this point in a comment he made about mutations. Grassé compared mutations to "**making mistakes in the letters when copying a written text.**" And as with mutations, letter mistakes cannot give rise to any information, but merely damage such information as already exists. Grassé explained this fact in this way:

Mutations, in time, occur incoherently. They are not complementary to one another, nor are they cumulative in successive generations toward a given direction. They modify what preexists, but they do so in disorder, no matter how.... As soon as some disorder, even slight, appears in an organized being, sickness, then death follow. There is no possible compromise between the phenomenon of life and anarchy.<sup>24</sup>

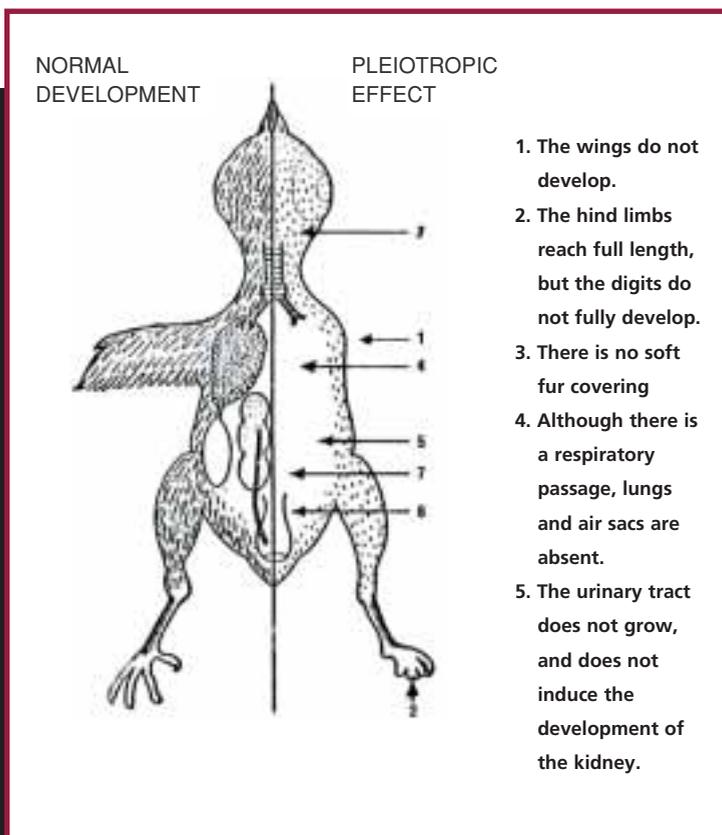
So for that reason, as Grassé puts it, "**No matter how numerous they may be, mutations do not produce any kind of evolution.**"<sup>25</sup>

### **The Pleiotropic Effect**

The most important proof that mutations lead only to damage, is the process of genetic coding. Almost all of the genes in a fully developed living thing carry more than one piece of information. For instance, one gene may control both the height and the eye color of that organism. Microbiologist Michael Denton explains this characteristic of genes in higher organisms such as human beings, in this way:

The effects of genes on development are often surprisingly diverse. In the house mouse, nearly every coat-colour gene has some effect on body size. Out of seventeen x-ray induced eye colour mutations in the fruit fly *Drosophila melanogaster*, fourteen affected the shape of the sex organs of the

## DARWINISM REFUTED



On the left we can see the normal development of a domesticated fowl, and on the right the harmful effects of a mutation in the pleiotropic gene. Careful examination shows that a mutation in just one gene damages many different organs. Even if we hypothesize that mutation could have a beneficial effect, this "pleiotropic effect" would remove the advantage by damaging many more organs.

female, a characteristic that one would have thought was quite unrelated to eye colour. Almost every gene that has been studied in higher organisms has been found to effect more than one organ system, a multiple effect which is known as pleiotropy. As Mayr argues in *Population, Species and Evolution*: "It is doubtful whether any genes that are not pleiotropic exist in higher organisms."<sup>26</sup>

Because of this characteristic of the genetic structure of living things, any coincidental change because of a mutation, in any gene in the DNA, will affect more than one organ. Consequently, this mutation will not be restricted to one part of the body, but will reveal more of its destructive impact. Even if one of these impacts turns out to be beneficial, as a result of a very rare coincidence, the unavoidable effects of the other damage it causes will more than outweigh those benefits.

To summarize, there are three main reasons why mutations cannot make evolution possible:

1- The direct effect of mutations is harmful: Since they occur randomly, they almost always damage the living organism that undergoes them. Reason tells us that unconscious intervention in a perfect and complex structure will not improve that structure, but will rather impair it. Indeed, no "useful mutation" has ever been observed.

2- Mutations add no new information to an organism's DNA: The particles making up the genetic information are either torn from their places, destroyed, or carried off to different places. Mutations cannot make a living thing acquire a new organ or a new trait. They only cause abnormalities like a leg sticking out of the back, or an ear from the abdomen.

3- In order for a mutation to be transferred to the subsequent generation, it has to have taken place in the reproductive cells of the organism: A random change that occurs in a cell or organ of the body cannot be transferred to the next generation. For example, a human eye altered by the effects of radiation, or by other causes, will not be passed on to subsequent generations.

All the explanations provided above indicate that natural selection and mutation have no evolutionary effect at all. So far, no observable example of "evolution" has been obtained by this method. Sometimes, evolutionary biologists claim that "they cannot observe the evolutionary effect of natural selection and mutation mechanisms since these mechanisms take place only over an extended period of time." However, this argument, which is just a way of making themselves feel better, is baseless, in the sense that it lacks any scientific foundation. During his lifetime, a scientist can observe thousands of generations of living things with short life spans such as fruit flies or bacteria, and still observe no

The *Escherichia coli* bacterium is no different from specimens a billion years old. Countless mutations over this long period have not led to any structural changes.



"evolution." Pierre-Paul Grassé states the following about the unchanging nature of bacteria, a fact which invalidates evolution:

Bacteria ...are the organisms which, because of their huge numbers, produce the most mutants. [B]acteria ...exhibit a great fidelity to their species. The bacillus *Escherichia coli*, whose mutants have been studied very carefully, is the best example. The reader will agree that it is surprising, to say the least, to want to prove evolution and to discover its mechanisms and then to choose as a material for this study a being which practically stabilized a billion years ago! **What is the use of their unceasing mutations, if they do not [produce evolutionary] change?** In sum, the mutations of bacteria and viruses are merely hereditary fluctuations around a median position; a swing to the right, a swing to the left, but no final evolutionary effect. Cockroaches, which are one of the most venerable living insect groups, have remained more or less unchanged since the Permian, yet they have undergone as many mutations as *Drosophila*, a Tertiary insect.<sup>27</sup>

Briefly, it is impossible for living beings to have evolved, because there exists no mechanism in nature that can cause evolution. Furthermore, this conclusion agrees with the evidence of the fossil record, which does not demonstrate the existence of a process of evolution, but rather just the contrary.

# THE TRUE ORIGIN OF SPECIES

When Darwin's *The Origin of Species* was published in 1859, it was believed that he had put forward a theory that could account for the extraordinary variety of living things. He had observed that there were different variations within the same species. For instance, while wandering through England's animal fairs, he noticed that there were many different breeds of cow, and that stockbreeders selectively mated them and produced new breeds. Taking that as his starting point, he continued with the logic that "living things can naturally diversify within themselves," which means that over a long period of time all living things could have descended from a common ancestor.

However, this assumption of Darwin's about "the origin of species" was not actually able to explain their origin at all. Thanks to developments in genetic science, it is now understood that increases in variety within one species can never lead to the emergence of another new species. What Darwin believed to be "evolution," was actually "variation."

## The Meaning of Variations

Variation, a term used in genetics, refers to a genetic event that causes the individuals or groups of a certain type or species to possess different characteristics from one another. For example, all the people on earth carry basically the same genetic information, yet some have slanted eyes, some have red hair, some have long noses, and others are short of stature, all depending on the extent of the variation potential of this genetic information.

Variation does not constitute evidence for evolution because variations are but the outcomes of different combinations of already existing genetic information, and they do not add any new characteristic to the genetic information. The important thing for the theory of evolution, however, is the question of how brand-new information to make a brand-new species could come about.

Variation always takes place within the limits of genetic information. In the science of genetics, this limit is called the "gene pool." All of the characteristics present in the gene pool of a species may come to light in various ways due to variation. For example, as a result of variation, varieties that have relatively longer tails or shorter legs may appear in a certain species of reptile, since information for both long-legged and short-legged forms may exist in the gene pool of that species. However, variations do not transform reptiles into birds by adding wings or feathers to them, or by changing their metabolism. Such a change requires an increase in the genetic information of the living thing, which is certainly not possible through variations.

Darwin was not aware of this fact when he formulated his theory. He thought that there was no limit to variations. In an article he wrote in 1844 he stated: "That a limit to variation does exist in nature is assumed by most authors, though I am unable to discover a single fact on which this belief is grounded."<sup>28</sup> In *The Origin of Species* he cited different examples of variations as the most important evidence for his theory.

For instance, according to Darwin, animal breeders who mated different varieties of cattle in order to bring about new varieties that produced more milk, were ultimately going to transform them into a different species. Darwin's notion of "unlimited variation" is best seen in the following sentence from *The Origin of Species*:

I can see no difficulty in a race of bears being rendered, by natural selection, more and more aquatic in their structure and habits, with larger and larger mouths, till a creature was produced as monstrous as a whale.<sup>29</sup>

The reason Darwin cited such a far-fetched example was the primitive understanding of science in his day. Since then, in the 20th century, science has posited the principle of "genetic stability" (genetic homeostasis), based on the results of experiments conducted on living things. This principle holds that, since all mating attempts carried out to

transform a species into another have been inconclusive, there are strict barriers among different species of living things. This meant that it was absolutely impossible for animal breeders to convert cattle into a different species by mating different variations of them, as Darwin had postulated.

Norman Macbeth, who disproved Darwinism in his book *Darwin Retried*, states:

The heart of the problem is whether living things do indeed vary to an unlimited extent... The species look stable. We have all heard of disappointed breeders who carried their work to a certain point only to see the animals or plants revert to where they had started. Despite strenuous efforts for two or three centuries, it has never been possible to produce a blue rose or a black tulip.<sup>30</sup>

Luther Burbank, considered the most competent breeder of all time, expressed this fact when he said, "there are limits to the development possible, and these limits follow a law."<sup>31</sup> In his article titled "Some Biological Problems With the Natural Selection Theory," Jerry Bergman comments by quoting from biologist Edward Deevey who explains that variations always take place within strict genetic boundaries:

Deevey concludes, "Remarkable things have been done by cross-breeding ... but wheat is still wheat, and not, for instance, grapefruit. We can no more grow wings on pigs than hens can make cylindrical eggs." A more contemporary example is the average increase in male height that has occurred the past century. Through better health care (and perhaps also some sexual selection, as some women prefer taller men as mates) males have reached a record adult height during the last century, but the increase is rapidly disappearing, indicating that we have reached our limit.<sup>32</sup>

In short, variations only bring about changes which remain within the boundaries of the genetic information of species; they can never add new genetic data to them. For this reason, no variation can be considered an example of evolution. No matter how often you mate different breeds of dogs or horses, the end result will still be dogs or horses, with no new species emerging. The Danish scientist W. L. Johannsen sums the matter up this way:

The variations upon which Darwin and Wallace placed their emphasis cannot be selectively pushed beyond a certain point, that such variability does not contain the secret of 'indefinite departure'.<sup>33</sup>

## Confessions About "Microevolution"

As we have seen, genetic science has discovered that variations, which Darwin thought could account for "the origin of species," actually do no such thing. For this reason, evolutionary biologists were forced to distinguish between variation within species and the formation of new ones, and to propose two different concepts for these different phenomena. Diversity within a species—that is, variation—they called "microevolution," and the hypothesis of the development of new species was termed "macroevolution."

These two concepts have appeared in biology books for quite some time. But there is actually a deception going on here, because the examples of variation that evolutionary biologists have called "microevolution" actually have nothing to do with the theory of evolution. The theory of evolution proposes that living things can develop and take on new genetic data by the mechanisms of mutation and natural selection. However, as we have just seen, variations can never create new genetic information, and are thus unable to bring about "evolution." Giving variations the name of "microevolution" is actually an ideological preference on the part of evolutionary biologists.

The impression that evolutionary biologists have given by using the term "microevolution" is the false logic that over time variations can form brand new classes of living things. And many people who are not already well-informed on the subject come away with the superficial idea that "as it spreads, microevolution can turn into macroevolution." One can often see examples of that kind of thinking. Some "amateur" evolutionists put forward such examples of logic as the following: since human beings' average height has risen by two centimeters in just a century, this means that over millions of years any kind of evolution is possible. However, as has been shown above, all variations such as changes in average height happen within specific genetic bounds, and are trends that have nothing to do with evolution.

In fact, nowadays even evolutionist experts accept that the variations they call "microevolution" cannot lead to new classes of living things—in other words, to "macroevolution." In a 1996 article in the leading journal *Developmental Biology*, the evolutionary biologists S.F. Gilbert, J.M. Opitz, and R.A. Raff explained the matter this way:



Finch beaks, which Darwin saw in the Galapagos Islands and thought were evidence for his theory, are actually an example of genetic variation, and not evidence for macroevolution.

The Modern Synthesis is a remarkable achievement. However, starting in the 1970s, many biologists began questioning its adequacy in explaining evolution. Genetics might be adequate for explaining microevolution, but microevolutionary changes in gene frequency were not seen as able to turn a reptile into a mammal or to convert a fish into an amphibian. Microevolution looks at adaptations that concern only the survival of the fittest, not the arrival of the fittest. As Goodwin (1995) points out, **"the origin of species—Darwin's problem—remains unsolved."**<sup>34</sup>

The fact that "microevolution" cannot lead to "macroevolution," in other words that variations offer no explanation of the origin of species, has been accepted by other evolutionary biologists, as well. The noted author and science expert Roger Lewin describes the result of a four-day symposium held in November 1980 at the Chicago Museum of Natural History, in which 150 evolutionists participated:

The central question of the Chicago conference was whether the mechanisms underlying microevolution can be extrapolated to explain the phenomena of macroevolution. ...The answer can be given as a clear, No.<sup>35</sup>

We can sum up the situation like this: Variations, which Darwinism has seen as "evidence of evolution" for some hundred years, actually have nothing to do with "the origin of species." Cows can be mated together for millions of years, and different breeds of cows may well emerge. But cows can never turn into a different species—giraffes or elephants for instance. In the same way, the different finches that Darwin saw on the Galapagos Islands are another example of variation that is no evidence for "evolution." Recent observations have revealed that the finches did not undergo an unlimited variation as Darwin's theory presupposed.

Moreover, most of the different types of finches which Darwin thought represented 14 distinct species actually mated with one another, which means that they were variations that belonged to the same species. Scientific observation shows that the finch beaks, which have been mythicized in almost all evolutionist sources, are in fact an example of "variation"; therefore, they do not constitute evidence for the theory of evolution. For example, Peter and Rosemary Grant, who spent years observing the finch varieties in the Galapagos Islands looking for evidence for Darwinistic evolution, were forced to conclude that "the population, subjected to natural selection, is oscillating back and forth," a fact which implied that no "evolution" that leads to the emergence of new traits ever takes place there.<sup>36</sup>

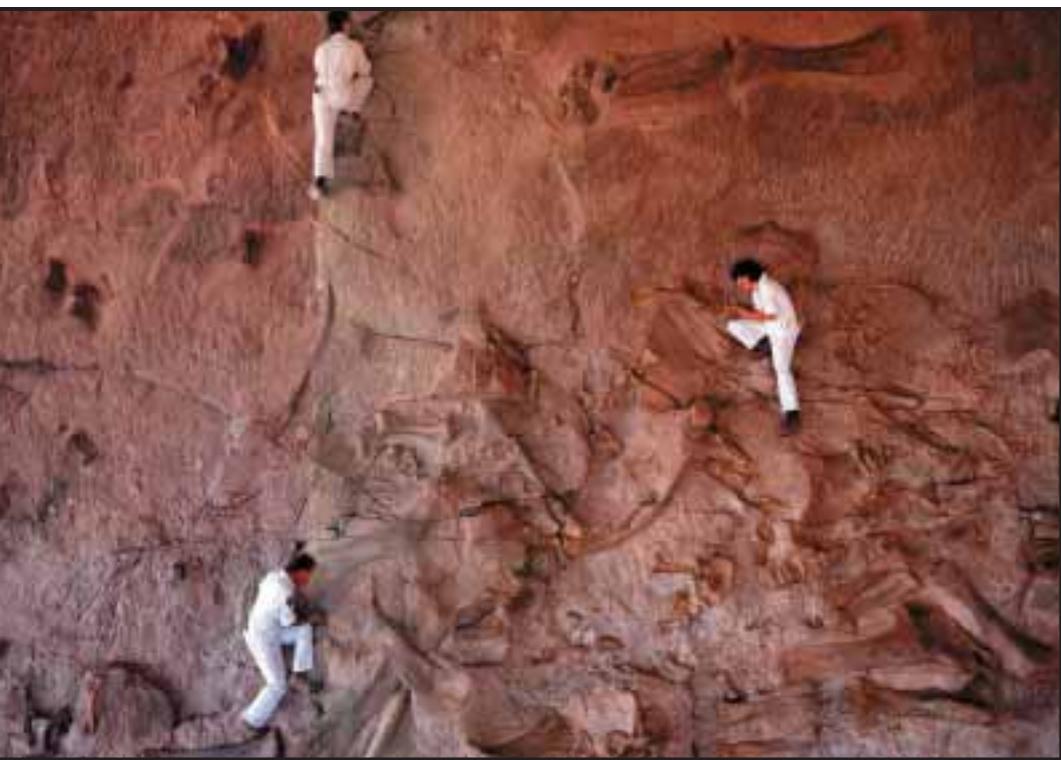
So for these reasons, evolutionists are still unable to resolve Darwin's problem of the "origin of species."

### **The Origin of Species in the Fossil Record**

The evolutionist assertion is that each species on earth came from a single common ancestor through minor changes. In other words, the theory considers life as a continuous phenomenon, without any preordained or fixed categories. However, the observation of nature clearly does not reveal such a continuous picture. What emerges from the living world is that life forms are strictly separated in very distinct categories. Robert Carroll, an evolutionist authority, admits this fact in his *Patterns and Processes of Vertebrate Evolution*:

Although an almost incomprehensible number of species inhabit Earth today, they do not form a continuous spectrum of barely distinguishable intermediates. Instead, nearly all species can be recognized as belonging to a relatively limited number of clearly distinct major groups, with very few illustrating intermediate structures or ways of life.<sup>37</sup>

Therefore, evolutionists assume that "intermediate" life forms that constitute links between living organisms have lived in the past. This is why it is considered that the fundamental science that can shed light on the matter is paleontology, the science of the study of fossils. Evolution is alleged to be a process that took place in the past, and the only scientific source that can provide us with information on the history of life is fossil



The most important branch of science for shedding light on the origin of life on earth is paleontology, the study of fossils. Fossil beds, studied with great intensity for the last two hundred years, reveal a picture totally at odds with Darwin's theory. Species did not emerge through small cumulative changes, they appeared quite suddenly, and fully-formed.

discoveries. The well-known French paleontologist Pierre-Paul Grassé has this to say on the subject:

Naturalists must remember that the process of evolution is revealed only through fossil forms... *only* paleontology can provide them with the evidence of evolution and reveal its course or mechanisms.<sup>38</sup>

In order for the fossil record to shed any light on the subject, we shall have to compare the hypotheses of the theory of evolution with fossil discoveries.

According to the theory of evolution, every species has emerged from a predecessor. One species which existed previously turned into something else over time, and all species have come into being in this way. According to the theory, this transformation proceeds gradually over millions of years.

If this were the case, then innumerable intermediate species should have lived during the immense period of time when these transformations

were supposedly occurring. For instance, there should have lived in the past some half-fish/half-reptile creatures which had acquired some reptilian traits in addition to the fish traits they already had. Or there should have existed some reptile/bird creatures, which had acquired some avian traits in addition to the reptilian traits they already possessed. Evolutionists refer to these imaginary creatures, which they believe to have lived in the past, as "transitional forms."

If such animals had really existed, there would have been millions, even billions, of them. More importantly, the remains of these creatures should be present in the fossil record. The number of these transitional forms should have been even greater than that of present animal species, and their remains should be found all over the world. In *The Origin of Species*, Darwin accepted this fact and explained:

If my theory be true, numberless intermediate varieties, linking most closely all of the species of the same group together must assuredly have existed... Consequently evidence of their former existence could be found only amongst fossil remains.<sup>39</sup>

Even Darwin himself was aware of the absence of such transitional forms. He hoped that they would be found in the future. Despite his optimism, he realized that these missing intermediate forms were the biggest stumbling-block for his theory. That is why he wrote the following in the chapter of the *The Origin of Species* entitled "Difficulties of the Theory":

...Why, if species have descended from other species by fine gradations, **do we not everywhere see innumerable transitional forms?** Why is not all nature in confusion, instead of the species being, as we see them, well defined?... But, as by this theory innumerable transitional forms must have existed, why do we not find them embedded in countless numbers in the crust of the earth?... But in the intermediate region, having intermediate conditions of life, why do we not now find closely-linking intermediate varieties? This difficulty for a long time quite confounded me.<sup>40</sup>

The only explanation Darwin could come up with to counter this objection was the argument that the fossil record uncovered so far was inadequate. He asserted that when the fossil record had been studied in detail, the missing links would be found.

## **The Question of Transitional Forms and Stasis**

Believing in Darwin's prophecy, evolutionary paleontologists have been digging up fossils and searching for missing links all over the world since the middle of the nineteenth century. Despite their best efforts, no transitional forms have yet been uncovered. All the fossils unearthed in excavations have shown that, contrary to the beliefs of evolutionists, life appeared on earth all of a sudden and fully-formed.

Robert Carroll, an expert on vertebrate paleontology and a committed evolutionist, comes to admit that the Darwinist hope has not been satisfied with fossil discoveries:

Despite more than a hundred years of intense collecting efforts since the time of Darwin's death, the fossil record still does not yield the picture of infinitely numerous transitional links that he expected.<sup>41</sup>

Another evolutionary paleontologist, K. S. Thomson, tells us that new groups of organisms appear very abruptly in the fossil record:

When a major group of organisms arises and first appears in the record, it seems to come fully equipped with a suite of new characters not seen in related, putatively ancestral groups. These radical changes in morphology and function appear to arise very quickly...<sup>42</sup>

Biologist Francis Hitching, in his book *The Neck of the Giraffe: Where Darwin Went Wrong*, states:

If we find fossils, and if Darwin's theory was right, we can predict what the rock should contain; finely graduated fossils leading from one group of creatures to another group of creatures at a higher level of complexity. The 'minor improvements' in successive generations should be as readily preserved as the species themselves. But this is hardly ever the case. In fact, the opposite holds true, as Darwin himself complained; "innumerable transitional forms must have existed, but why do we not find them embedded in countless numbers in the crust of the earth?" Darwin felt though that the "extreme imperfection" of the fossil record was simply a matter of digging up more fossils. But as more and more fossils were dug up, it was found that almost all of them, without exception, were very close to current living animals.<sup>43</sup>

The fossil record reveals that species emerged suddenly, and with totally different structures, and remained exactly the same over the longest geological periods. Stephen Jay Gould, a Harvard University paleontologist

There is no gradual development in the fossil record such as Darwin had predicted. Different species emerged all at once, with their own peculiar bodily structures.



and well-known evolutionist, admitted this fact first in the late 70s:

The history of most fossil species include two features particularly inconsistent with gradualism: 1) **Stasis** - most species exhibit no directional change during their tenure on earth. They appear in the fossil record looking much the same as when they disappear; morphological change is usually limited and directionless; 2) **Sudden appearance** - in any local area, a species does not arise gradually by the steady transformation of its ancestors; it appears all at once and 'fully formed'.<sup>44</sup>

Further research only strengthened the facts of stasis and sudden appearance. Stephen Jay Gould and Niles Eldredge write in 1993 that "most species, during their geological history, either do not change in any appreciable way, or else they fluctuate mildly in morphology, with no apparent direction."<sup>45</sup> Robert Carroll is forced to agree in 1997 that "Most major groups appear to originate and diversify over geologically very short durations, and to persist for much longer periods without major morphological or trophic change."<sup>46</sup>

At this point, it is necessary to clarify just what the concept of "transitional form" means. The intermediate forms predicted by the theory of evolution are living things falling between two species, but which possess deficient or semi-developed organs. But sometimes the concept of intermediate form is misunderstood, and living structures which do not possess the features of transitional forms are seen as actually doing so. For instance, if one group of living things possesses features which belong to another, this is not an intermediate form feature. The platypus, a mammal living in Australia, reproduces by laying eggs just like reptiles. In addition, it has a bill similar to that of a duck. Scientists describe such creatures as the platypus as "mosaic creatures." That mosaic creatures do not count as

intermediate forms is also accepted by such foremost paleontologists as Stephen Jay Gould and Niles Eldredge.<sup>47</sup>

### **The Adequacy of the Fossil Record**

Some 140 years ago Darwin put forward the following argument: "Right now there are no transitional forms, yet further research will uncover them." Is this argument still valid today? In other words, considering the conclusions from the entire fossil record, should we accept that transitional forms never existed, or should we wait for the results of new research?

The wealth of the existing fossil record will surely answer this question. When we look at the paleontological findings, we come across an abundance of fossils. Billions of fossils have been uncovered all around the world.<sup>48</sup> Based on these fossils, 250,000 distinct species have been identified, and these bear striking similarities to the 1.5 million identified species currently living on earth.<sup>49</sup> (Of these 1.5 million species, 1 million are insects.) Despite the abundance of fossil sources, not a single transitional form has been uncovered, and it is unlikely that any transitional forms will be found as a result of new excavations.

A professor of paleontology from Glasgow University, T. Neville George, admitted this fact years ago:

There is no need to apologize any longer for the poverty of the fossil record. In some ways it has become almost unmanageably rich and discovery is outpacing integration... **The fossil record nevertheless continues to be composed mainly of gaps.**<sup>50</sup>

And Niles Eldredge, the well-known paleontologist and curator of the American Museum of Natural History, expresses as follows the invalidity of Darwin's claim that the insufficiency of the fossil record is the reason why no transitional forms have been found:

The record jumps, and all the evidence shows that the record is real: **the gaps we see reflect real events in life's history** – not the artifact of a poor fossil record.<sup>51</sup>

Another American scholar, Robert Wesson, states in his 1991 book *Beyond Natural Selection*, that "**the gaps in the fossil record are real and meaningful.**" He elaborates this claim in this way:

# STASIS IN THE FOSSIL RECORD

If evolution had really happened, then living things should have emerged by gradual changes, and have continued to change over time, whereas the fossil record shows the exact opposite. Different groups of living things suddenly emerged with no similar ancestors behind them, and remained static for millions of years, undergoing no changes at all.



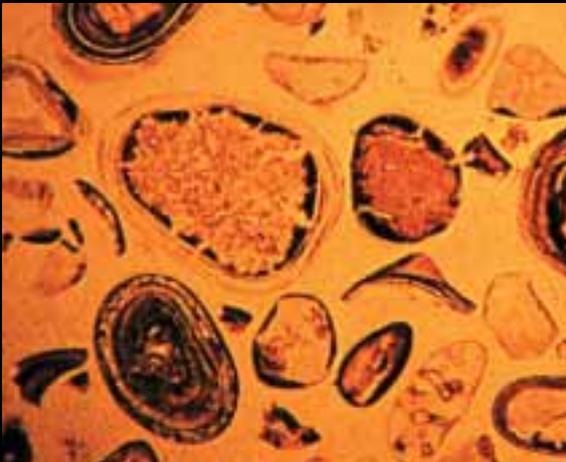
A 100-150 million-year-old starfish fossil



Horseshoe crab" fossil from the Ordovician Age. This 450-million-year-old fossil is no different from specimens living today.



Oyster fossils from the Ordovician Age, no different from modern oysters.



1.9-million-year-old fossil bacteria from Western Ontario in the United States. They have the same structures as bacteria living today.



Ammonites emerged some 350 million years ago, and became extinct 65 million years ago. The structure seen in the fossil above never changed during the intervening 300 million years.





An insect fossil in amber, some 170 million years old, found on the Baltic Sea coast. It is no different from its modern counterparts.



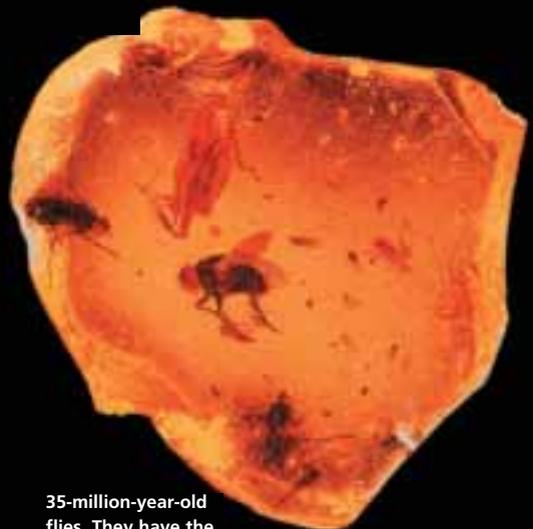
The oldest known fossil scorpion, found in East Kirkton in Scotland. This species, known as *Pulmonoscorpius kirktoniensis*, is 320 million years old, and no different from today's scorpions.



140-million-year-old dragonfly fossil found in Bavaria in Germany. It is identical to living dragonflies.



170-million-year-old fossil shrimp from the Jurassic Age. It is no different from living shrimps.



35-million-year-old flies. They have the same bodily structure as flies today.

The gaps in the record are real, however. The absence of a record of any important branching is quite phenomenal. Species are usually static, or nearly so, for long periods, species seldom and genera never show evolution into new species or genera but replacement of one by another, and change is more or less abrupt.<sup>52</sup>

This situation invalidates the above argument, which has been stated by Darwinism for 140 years. The fossil record is rich enough for us to understand the origins of life, and explicitly reveals that distinct species came into existence on earth all of a sudden, with all their distinct forms.

### **The Truth Revealed by the Fossil Record**

But where does the "evolution-paleontology" relationship, which has taken subconscious root in society over many decades, actually stem from? Why do most people have the impression that there is a positive connection between Darwin's theory and the fossil record whenever the latter is mentioned? The answer to these questions is supplied in an article in the leading journal *Science*:

A large number of well-trained scientists outside of evolutionary biology and paleontology have unfortunately gotten the idea that the fossil record is far more Darwinian than it is. This probably comes from the oversimplification inevitable in secondary sources: low-level textbooks, semipopular articles, and so on. Also, there is probably some wishful thinking involved. In the years after Darwin, his advocates hoped to find predictable progressions. In general these have not been found yet the optimism has died hard, and **some pure fantasy has crept into textbooks.**<sup>53</sup>

N. Eldredge and I. Tattersall also make an important comment:

That individual kinds of fossils remain recognizably the same throughout the length of their occurrence in the fossil record had been known to paleontologists long before Darwin published his *Origin*. Darwin himself, ...prophesied that future generations of paleontologists would fill in these gaps by diligent search ...One hundred and twenty years of paleontological research later, **it has become abundantly clear that the fossil record will not confirm this part of Darwin's predictions.** Nor is the problem a miserably poor record. The fossil record simply shows that this prediction is wrong.

The observation that species are amazingly conservative and static entities



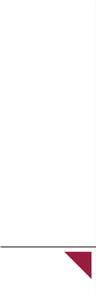
**25-million-year-old  
termite fossils in amber.  
They are identical to  
termites living today.**

throughout long periods of time has all the qualities of **the emperor's new clothes: everyone knew it but preferred to ignore it.** Paleontologists, faced with a recalcitrant record obstinately refusing to yield Darwin's predicted pattern, **simply looked the other way.**<sup>54</sup>

Likewise, the American paleontologist Steven M. Stanley describes how the Darwinist dogma, which dominates the world of science, has ignored this reality demonstrated by the fossil record:

The known fossil record is not, and never has been, in accord with gradualism. What is remarkable is that, through a variety of historical circumstances, even the history of opposition has been obscured. ... 'The majority of paleontologists felt their evidence simply contradicted Darwin's stress on minute, slow, and cumulative changes leading to species transformation.' ... **their story has been suppressed.**<sup>55</sup>

Let us now examine the facts of the fossil record, which have been silenced for so long, in a bit more detail. In order to do this, we shall have to consider natural history from the most remote ages to the present, stage by stage.



# TRUE NATURAL HISTORY-I

## (FROM INVERTEBRATES TO REPTILES)

For some people, the very concept of natural history implies the theory of evolution. The reason for this is the heavy propaganda that has been carried out. Natural history museums in most countries are under the control of materialist evolutionary biologists, and it is they who describe the exhibits in them. They invariably describe creatures that lived in prehistory and their fossil remains in terms of Darwinian concepts. One result of this is that most people think that natural history is equivalent to the concept of evolution.

However, the facts are very different. Natural history reveals that different classes of life emerged on the earth not through any evolutionary process, but all at once, and with all their complex structures fully developed right from the start. Different living species appeared completely independently of one another, and with no "transitional forms" between them.

In this chapter, we shall examine real natural history, taking the fossil record as our basis.

### **The Classification of Living Things**

Biologists place living things into different classes. This classification, known as "taxonomy," or "systematics," goes back as far as the eighteenth-century Swedish scientist Carl von Linné, known as Linnaeus. The system of classification established by Linnaeus has continued and been developed right up to the present day.

There are hierarchical categories in this classificatory system. Living

things are first divided into kingdoms, such as the plant and animal kingdoms. Then these kingdoms are sub-divided into phyla, or categories. Phyla are further divided into subgroups. From top to bottom, the classification is as follows:

Kingdom  
Phylum (plural Phyla)  
Class  
Order  
Family  
Genus (plural Genera)  
Species

Today, the great majority of biologists accept that there are five (or six) separate kingdoms. As well as plants and animals, they consider fungi, protista (single-celled creatures with a cell nucleus, such as amoebae and some primitive algae), and monera (single-celled creatures with no cell nucleus, such as bacteria), as separate kingdoms. Sometimes the bacteria are subdivided into eubacteria and archaebacteria, for six kingdoms, or, on some accounts, three "superkingdoms" (eubacteria, archaebacteria and eukarya). The most important of all these kingdoms is without doubt the animal kingdom. And the largest division within the animal kingdom, as we saw earlier, are the different phyla. When designating these phyla, the fact that each one possesses completely different physical structures should always be borne in mind. *Arthropoda* (insects, spiders, and other creatures with jointed legs), for instance, are a phylum by themselves, and all the animals in the phylum have the same fundamental physical structure. The phylum called *Chordata* includes those creatures with the notochord, or, most commonly, a spinal column. All the animals with the spinal column such as fish, birds, reptiles, and mammals that we are familiar with in daily life are in a subphylum of *Chordata* known as vertebrates.

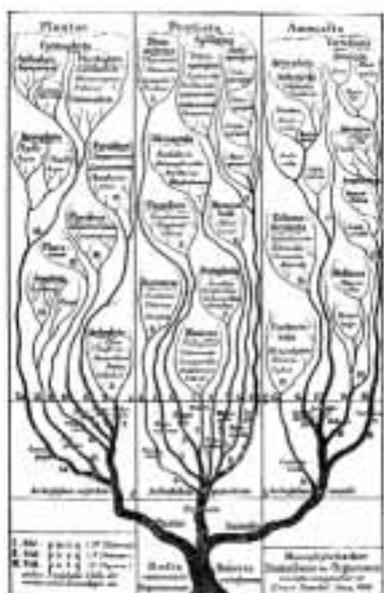
There are around 35 different phyla of animals, including the *Mollusca*, which include soft-bodied creatures such as snails and octopuses, or the *Nematoda*, which include diminutive worms. The most important feature of these categories is, as we touched on earlier, that they possess totally different physical characteristics. The categories below the phyla possess basically similar body plans, but the phyla are very different

from one another.

After this general information about biological classification, let us now consider the question of how and when these phyla emerged on earth.

## Fossils Reject the "Tree of Life"

Let us first consider the Darwinist hypothesis. As we know, Darwinism proposes that life developed from one single common ancestor, and took on all its varieties by a series of tiny changes. In that case, life should first have emerged in very similar and simple forms. And



The "tree of life" drawn by the evolutionary biologist Ernst Haeckel in 1866.

according to the same theory, the differentiation between, and growing complexity in, living things must have happened in parallel over time.

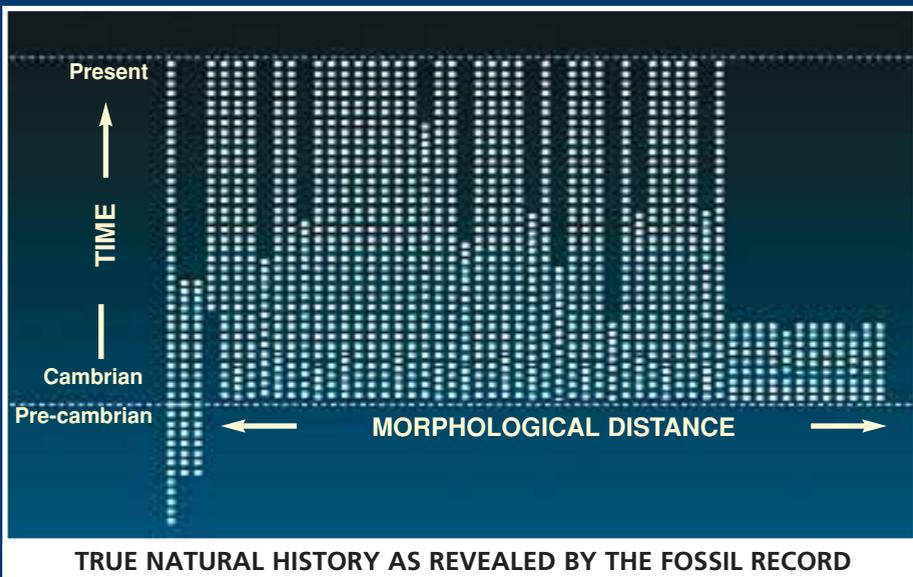
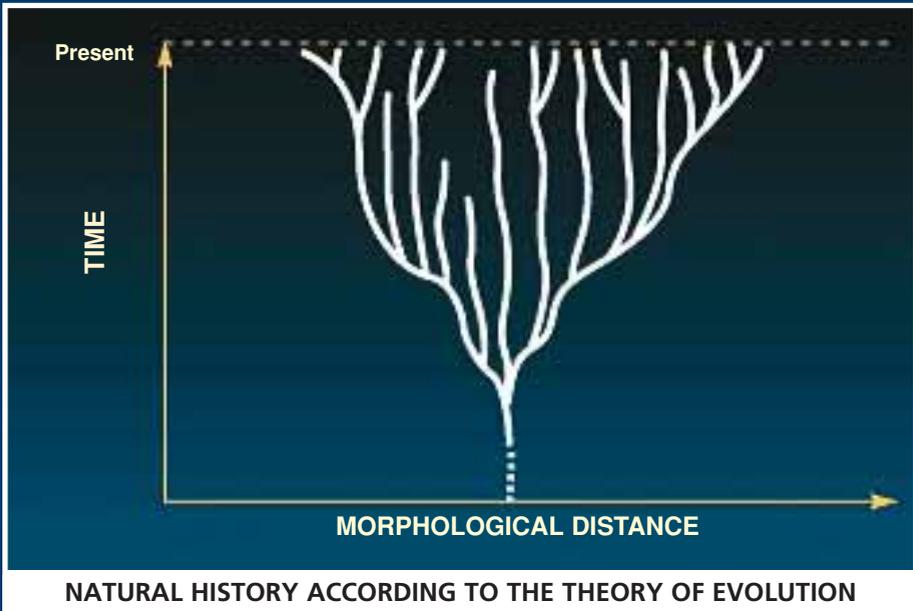
In short, according to Darwinism, life must be like a tree, with a common root, subsequently splitting up into different branches. And this hypothesis is constantly emphasized in Darwinist sources, where the concept of the "tree of life" is frequently employed. According to this tree concept, phyla—the fundamental units of classification between living things—came about by stages, as in the diagram to the left. According to Darwinism, one phylum must first emerge, and then the other phyla must slowly come about with minute changes over very long periods of time. The Darwinist hypothesis is that the number of animal phyla

must have gradually increased in number. The diagram to the left shows the gradual increase in the number of animal phyla according to the Darwinian view.

According to Darwinism, life must have developed in this way. But is this really how it happened?

Definitely not. Quite the contrary: animals have been very different and complex since the moment they first emerged. **All the animal phyla**

# THE FOSSIL RECORD DENIES THE THEORY OF EVOLUTION



The theory of evolution maintains that different groups of living things (phyla) developed from a common ancestor and grew apart with the passing of time. The diagram above states this claim: According to Darwinism, living things grew apart from one another like the branches on a tree.

But the fossil record shows just the opposite. As can be seen from the diagram below, different groups of living things emerged suddenly with their different structures. Some 100 phyla suddenly emerged in the Cambrian Age. Subsequently, the number of these fell rather than rose (because some phyla became extinct).

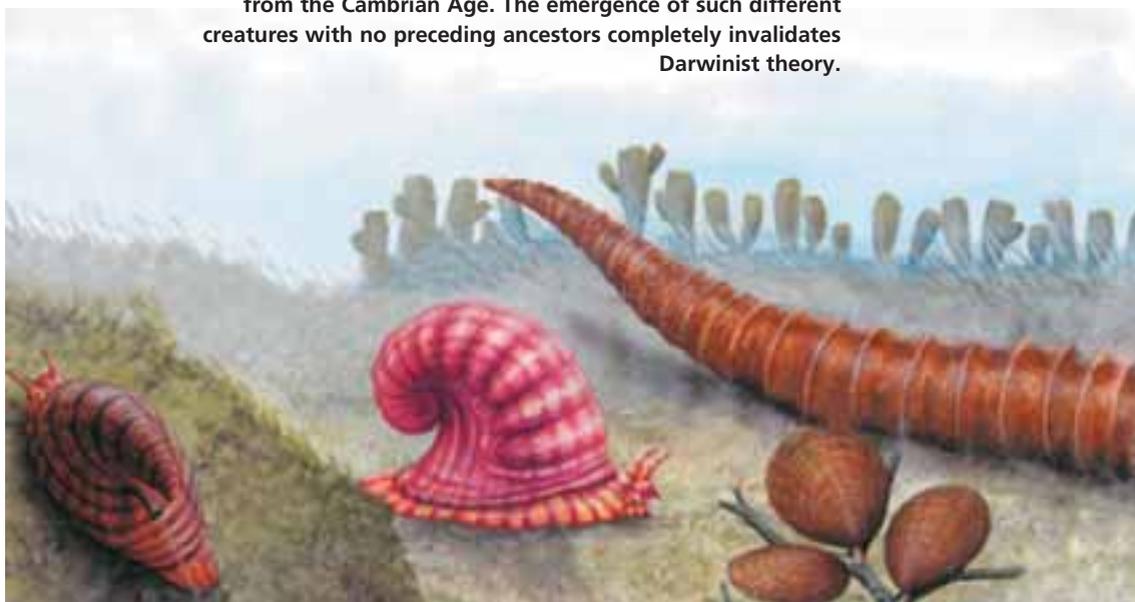
(From [www.arn.org](http://www.arn.org))

known today emerged at the same time, in the middle of the geological period known as the Cambrian Age. The Cambrian Age is a geological period estimated to have lasted some 65 million years, approximately between 570 to 505 million years ago. But the period of the abrupt appearance of major animal groups fit in an even shorter phase of the Cambrian, often referred to as the "Cambrian explosion." Stephen C. Meyer, P. A. Nelson, and Paul Chien, in a 2001 article based on a detailed literature survey, dated 2001, note that the "Cambrian explosion occurred within an exceedingly narrow window of geologic time, lasting no more than 5 million years."<sup>56</sup>

Before then, there is no trace in the fossil record of anything apart from single-celled creatures and a few very primitive multicellular ones. All animal phyla emerged completely formed and all at once, in the very short period of time represented by the Cambrian explosion. (Five million years is a very short time in geological terms!)

The fossils found in Cambrian rocks belong to very different creatures, such as snails, trilobites, sponges, jellyfish, starfish, shellfish, etc. Most of the creatures in this layer have complex systems and advanced structures, such as eyes, gills, and circulatory systems, exactly the same as those in modern specimens. These structures are at one and the same time very advanced, and very different.

**This illustration portrays living things with complex structures from the Cambrian Age. The emergence of such different creatures with no preceding ancestors completely invalidates Darwinist theory.**



Richard Monastersky, a staff writer at *Science News* magazine states the following about the "Cambrian explosion," which is a deathtrap for evolutionary theory:

A half-billion years ago, ...**the remarkably complex forms of animals we see today suddenly appeared.** This moment, right at the start of Earth's Cambrian Period, some 550 million years ago, marks the evolutionary explosion that filled the seas with the world's first complex creatures.<sup>57</sup>

The same article also quotes Jan Bergström, a paleontologist who studied the early Cambrian deposits in Chengjiang, China, as saying, "The Chengyang fauna demonstrates that the large animal phyla of today were present already in the early Cambrian and that they were as distinct from each other as they are today."<sup>58</sup>

How the earth came to overflow with such a great number of animal species all of a sudden, and how these distinct types of species with no common ancestors could have emerged, is a question that remains unanswered by evolutionists. The Oxford University zoologist Richard Dawkins, one of the foremost advocates of evolutionist thought in the world, comments on this reality that undermines the very foundation of all the arguments he has been defending:

For example the Cambrian strata of rocks... are the oldest ones in which we find most of the major invertebrate groups. And we find many of them



**A fossil  
from the  
Cambrian  
Age**



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.<sup>59</sup>

Phillip Johnson, a professor at the University of California at Berkeley who is also one of the world's foremost critics of Darwinism, describes the contradiction between this paleontological truth and Darwinism:

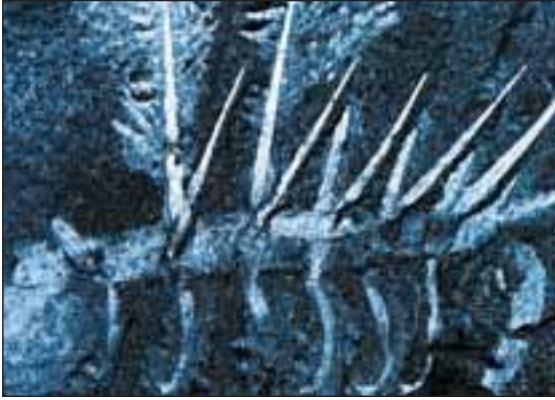
Darwinian theory predicts a "cone of increasing diversity," as the first living organism, or first animal species, gradually and continually diversified to create the higher levels of taxonomic order. The animal fossil record more resembles such a cone turned upside down, with **the phyla present at the start and thereafter decreasing.**<sup>60</sup>

As Phillip Johnson has revealed, far from its being the case that phyla came about by stages, in reality they all came into being at once, and some of them even became extinct in later periods. The diagrams on page 53 reveal the truth that the fossil record has revealed concerning the origin of phyla.

As we can see, in the Precambrian Age there were three different phyla consisting of single-cell creatures. But in the Cambrian Age, some 60 to 100 different animal phyla emerged all of a sudden. In the age that followed, some of these phyla became extinct, and only a few have come down to our day.

The well-known paleontologist Roger Lewin discusses this extraordinary fact, which totally demolishes all the Darwinist assumptions about the history of life:

Described recently as "the most important evolutionary event during the entire history of the Metazoa," the Cambrian explosion established virtually



**INTERESTING SPINES:** One of the creatures which suddenly emerged in the Cambrian Age was *Hallucigenia*, seen at top left. And as with many other Cambrian fossils, like the one at the right it has spines or a hard shell to protect it from attack by enemies. The question that evolutionists cannot answer is, "How could they have come by such an effective defense system at a time when there were no predators around?" The lack of predators at the time makes it impossible to explain the matter in terms of natural selection.

all the major animal body forms — Baupläne or phyla — that would exist thereafter, including many that were "weeded out" and became extinct. Compared with the 30 or so extant phyla, some people estimate that the Cambrian explosion may have generated as many as 100.<sup>61</sup>

## The Burgess Shale Fossils

Lewin continues to call this extraordinary phenomenon from the Cambrian Age an "evolutionary event," because of the loyalty he feels to Darwinism, but it is clear that the discoveries so far cannot be explained by any evolutionary approach.

What is interesting is that the new fossil findings make the Cambrian Age problem all the more complicated. In its February 1999 issue, *Trends in Genetics* (TIG), a leading science journal, dealt with this issue. In an article about a fossil bed in the Burgess Shale region of British Columbia, Canada, it confessed that fossil findings in the area offer no support for the theory of evolution.

The Burgess Shale fossil bed is accepted as one of the most important paleontological discoveries of our time. The fossils of many different species uncovered in the Burgess Shale appeared on earth all of a sudden, without having been developed from any pre-existing species found in preceding layers. *TIG* expresses this important problem as follows:

**Marrella: One of the interesting fossil creatures found in the Burgess Shale fossil bed.**



It might seem odd that fossils from one small locality, no matter how exciting, should lie at the center of a fierce debate about such broad issues in evolutionary biology. The reason is that animals burst into the fossil record in astonishing profusion during the Cambrian, seemingly from nowhere. Increasingly precise radiometric dating and new fossil discoveries have only sharpened the suddenness and scope of this biological revolution. The magnitude of this change in Earth's biota demands an explanation. Although many hypotheses have been proposed, the general consensus is that none is wholly convincing.<sup>62</sup>

These "not wholly convincing" hypotheses belong to evolutionary paleontologists. *TIG* mentions two important authorities in this context, Stephen Jay Gould and Simon Conway Morris. Both have written books to explain the "sudden appearance of living beings" from the evolutionist standpoint. However, as also stressed by *TIG*, neither *Wonderful Life* by Gould nor *The Crucible of Creation: The Burgess Shale and the Rise of Animals* by Simon Conway Morris has provided an explanation for the Burgess Shale fossils, or for the fossil record of the Cambrian Age in general.

Deeper investigation into the Cambrian Explosion shows what a great dilemma it creates for the theory of evolution. Recent findings indicate that almost all phyla, the most basic animal divisions, emerged abruptly in the Cambrian period. An article published in the journal *Science* in 2001 says: "The beginning of the Cambrian period, some 545 million years ago, saw the sudden appearance in the fossil record of almost all the main types of animals (phyla) that still dominate the biota today."<sup>63</sup> The same article notes that for such complex and distinct living groups to be explained according to the theory of evolution, very rich fossil beds showing a gradual developmental process should have been

found, but this has not yet proved possible:

This differential evolution and dispersal, too, must have required a previous history of the group for which there is no fossil record.<sup>64</sup>

The picture presented by the Cambrian fossils clearly refutes the assumptions of the theory of evolution, and provides strong evidence for the involvement of a "supernatural" being in their creation. Douglas Futuyma, a prominent evolutionary biologist, admits this fact:

Organisms either appeared on the earth fully developed or they did not. If they did not, they must have developed from pre-existing species by some process of modification. If they did appear in a fully developed state, they must indeed have been created by some omnipotent intelligence.<sup>65</sup>

The fossil record clearly indicates that living things did not evolve from primitive to advanced forms, but instead emerged all of a sudden in a fully formed state. This provides evidence for saying that life did not come into existence through random natural processes, but through an act of intelligent creation. In an article called "the Big Bang of Animal Evolution" in the leading journal *Scientific American*, the evolutionary paleontologist Jeffrey S. Levinton accepts this reality, albeit unwillingly, saying "Therefore, something special and very mysterious — some highly creative "force" — existed then."<sup>66</sup>

### **Molecular Comparisons Deepen Evolution's Cambrian Impasse**

Another fact that puts evolutionists into a deep quandary about the Cambrian Explosion is comparisons between different living taxa. The results of these comparisons reveal that animal taxa considered to be "close relatives" by evolutionists until quite recently, are in fact genetically very different, which makes the "intermediate form" hypothesis—which only exists theoretically—even more dubious. An article published in the *Proceedings of the National Academy of Sciences, USA*, in 2000 reports that recent DNA analyses have rearranged taxa that used to be considered "intermediate forms" in the past:

DNA sequence analysis dictates new interpretation of phylogenetic trees. Taxa that were once thought to represent successive grades of complexity at the base of the metazoan tree are being displaced to much higher positions

inside the tree. This leaves no evolutionary "intermediates" and forces us to rethink the genesis of bilaterian complexity.<sup>67</sup>

In the same article, evolutionist writers note that some taxa which were considered "intermediate" between groups such as sponges, cnidarians and ctenophores, can no longer be considered as such because of these new genetic findings. These writers say that they have "lost hope" of constructing such evolutionary family trees:

The new molecular based phylogeny has several important implications. Foremost among them is the disappearance of "intermediate" taxa between sponges, cnidarians, ctenophores, and the last common ancestor of bilaterians or "*Urbilateria*."...A corollary is that we have a major gap in the stem leading to the *Urbilateria*. We have lost the hope, so common in older evolutionary reasoning, of reconstructing the morphology of the "coelomate ancestor" through a scenario involving successive grades of increasing complexity based on the anatomy of extant "primitive" lineages.<sup>68</sup>

### **Trilobites vs. Darwin**

One of the most interesting of the many different species that suddenly emerged in the Cambrian Age is the now-extinct trilobites. Trilobites belonged to the *Arthropoda* phylum, and were very complicated creatures with hard shells, articulated bodies, and complex organs. The

Another illustration showing living things from the Cambrian Age.



fossil record has made it possible to carry out very detailed studies of trilobites' eyes. The trilobite eye is made up of hundreds of tiny facets, and each one of these contains two lens layers. This eye structure is a real wonder of design. David Raup, a professor of geology at Harvard, Rochester, and Chicago Universities, says, "the trilobites 450 million years ago used an optimal design which would require a well trained and imaginative optical engineer to develop today."<sup>69</sup>

The extraordinarily complex structure even in trilobites is enough to invalidate Darwinism on its own, because no complex creatures with similar structures lived in previous geological periods, which goes to show that trilobites emerged with no evolutionary process behind them. A 2001 *Science* article says:

Cladistic analyses of arthropod phylogeny revealed that trilobites, like eucrustaceans, are fairly advanced "twigs" on the arthropod tree. But fossils of these alleged ancestral arthropods are lacking. ...Even if evidence for an earlier origin is discovered, it remains a challenge to explain why so many animals should have increased in size and acquired shells within so short a time at the base of the Cambrian.<sup>70</sup>

Very little was known about this extraordinary situation in the Cambrian Age when Charles Darwin was writing *The Origin of Species*. Only since Darwin's time has the fossil record revealed that life suddenly emerged in the Cambrian Age, and that trilobites and other invertebrates



## DARWINISM REFUTED



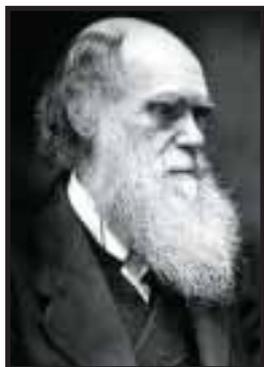
**Trilobite eyes, with their doublet structure and hundreds of tiny lensed units, were a wonder of design.**

came into being all at once. For this reason, Darwin was unable to treat the subject fully in the book. But he did touch on the subject under the heading "On the sudden appearance of groups of allied species in the lowest known fossiliferous strata," where he wrote the following about the Silurian Age (a name which at that time encompassed what we now call the Cambrian):

For instance, I cannot doubt that all the Silurian trilobites have descended from some one crustacean, which must have lived long before the Silurian age, and which probably differed greatly from any known animal... Consequently, if my theory be true, it is indisputable that before the lowest Silurian stratum was deposited, long periods elapsed, as long as, or probably far longer than, the whole interval from the Silurian age to the present day; and that during these vast, yet quite unknown, periods of time, the world swarmed with living creatures. To the question why we do not find records of these vast primordial periods, I can give no satisfactory answer.<sup>71</sup>

Darwin said "If my theory be true, [the Cambrian] Age must have been full of living creatures." As for the question of why there were no fossils of these creatures, he tried to supply an answer throughout his book, using the excuse that "the fossil record is very lacking." But nowadays the fossil record is quite complete, and it clearly reveals that creatures from the Cambrian Age did not have ancestors. This means that we have to reject that sentence of Darwin's which begins "If my theory be true." Darwin's hypotheses were invalid, and for that reason, his theory is mistaken.

The record from the Cambrian Age demolishes Darwinism, both with



Darwin said that if his theory was correct, the long periods before the trilobites should have been full of their ancestors. But not one of these creatures predicted by Darwin has ever been found.

the complex bodies of trilobites, and with the emergence of very different living bodies at the same time. Darwin wrote "If numerous species, belonging to the same genera or families, have really started into life all at once, the fact would be fatal to the theory of descent with slow modification through natural selection."<sup>72</sup>—that is, the theory at the heart of in his book. But as we saw earlier, some 60 different animal phyla started into life in the Cambrian Age, all together and at the same time, let alone small categories such as species. This proves that the picture which Darwin had described as "fatal to the theory" is in fact the case. This is why the Swiss evolutionary paleoanthropologist Stefan Bengtson, who confesses the lack of transitional links while describing the Cambrian Age, makes the following comment: "**Baffling (and**

**embarrassing) to Darwin, this event still dazzles us.**"<sup>73</sup>

Another matter that needs to be dealt with regarding trilobites is that the 530-million-year-old compound structure in these creatures' eyes has come down to the present day completely unchanged. Some insects today, such as bees and dragonflies, possess exactly the same eye structure.<sup>74</sup> This discovery deals yet another "fatal blow" to the theory of evolution's claim that living things develop from the primitive to the complex.

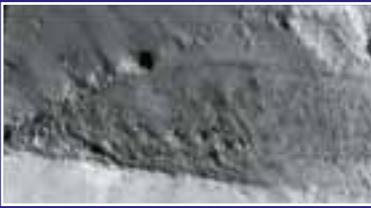
## The Origin of Vertebrates

As we said at the beginning, one of the phyla that suddenly emerged in the Cambrian Age is the *Chordata*, those creatures with a central nervous system contained within a braincase and a notochord or spinal column. Vertebrates are a subgroup of chordates. Vertebrates, divided into such fundamental classes as fish, amphibians, reptiles, birds, and mammals, are probably the most dominant creatures in the animal kingdom.

Because evolutionary paleontologists try to view every phylum as the evolutionary continuation of another phylum, they claim that the *Chordata* phylum evolved from another, invertebrate one. But the fact that, as with

## THE FISH OF THE CAMBRIAN

Until 1999, the question of whether any vertebrates were present in the Cambrian was limited to the discussion about *Pikaia*. But that year a stunning discovery deepened the evolutionary impasse regarding the Cambrian explosion: Chinese paleontologists at Chengjiang fauna discovered the fossils of two fish species that were about 530 million years old, a period known as the Lower Cambrian. Thus, it became crystal clear that along with all other phyla, the subphylum Vertebrata (Vertebrates) was also present in the Cambrian, without any evolutionary ancestors.



The two distinct fish species of the Cambrian, *Haikouichthys ercaicunensis* and *Myllokunmingia fengjiaoa*.

all phyla, the members of the *Chordata* emerged in the Cambrian Age invalidates this claim right from the very start. The oldest member of the *Chordata* phylum identified from the Cambrian Age is a sea-creature called *Pikaia*, which with its long body reminds one at first sight of a worm.<sup>75</sup> *Pikaia* emerged at the same time as all the other species in the phylum which could be proposed as its ancestor, and with no intermediate forms between them. Professor Mustafa Kuru, a Turkish evolutionary biologist, says in his book *Vertebrates*:

There is no doubt that chordates evolved from invertebrates. However, **the lack of transitional forms between invertebrates and chordates** causes people to put forward many assumptions.<sup>76</sup>

If there is no transitional form between chordates and invertebrates, then how can one say "there is no doubt that chordates evolved from invertebrates?" Accepting an assumption which lacks supporting evidence, without entertaining any doubts, is surely not a scientific approach, but a dogmatic one. After this statement, Professor Kuru discusses the evolutionist assumptions regarding the origins of vertebrates, and once again confesses that the fossil record of chordates consists only of gaps:

The views stated above about the origins of chordates and evolution are always met with suspicion, since they are not based on any fossil records.<sup>77</sup>

Evolutionary biologists sometimes claim that the reason why there exist no fossil records regarding the origin of vertebrates is because invertebrates have soft tissues and consequently leave no fossil traces. However this explanation is entirely unrealistic, since there is an abundance of fossil remains of invertebrates in the fossil record. Nearly all organisms in the Cambrian period were invertebrates, and tens of thousands of fossil examples of these species have been collected. For example, there are many fossils of soft-tissued creatures in Canada's Burgess Shale beds. (Scientists think that invertebrates were fossilized, and their soft tissues kept intact in regions such as Burgess Shale, by being suddenly covered in mud with a very low oxygen content.<sup>78</sup>)

The theory of evolution assumes that the first *Chordata*, such as *Pikaia*, evolved into fish. However, just as with the case of the supposed evolution of *Chordata*, the theory of the evolution of fish also lacks fossil evidence to support it. On the contrary, all distinct classes of fish emerged in the fossil record all of a sudden and fully-formed. There are millions of invertebrate fossils and millions of fish fossils; yet there is not even one fossil that is midway between them.

Robert Carroll admits the evolutionist impasse on the origin of several taxa among the early vertebrates:

We still have no evidence of the nature of the transition between cephalochordates and craniates. The earliest adequately known vertebrates already exhibit all the definitive features of craniates that we can expect to have preserved in fossils. No fossils are known that document the origin of jawed vertebrates.<sup>79</sup>

Another evolutionary paleontologist, Gerald T. Todd, admits a similar fact in an article titled "Evolution of the Lung and the Origin of Bony Fishes":

**All three subdivisions of bony fishes first appear in the fossil record at approximately the same time.** They are already widely divergent morphologically, and 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>80</sup>

# THE ORIGIN OF FISH

The fossil record shows that fish, like other kinds of living things, also emerged suddenly and already in possession of all their unique structures. In other words, fish were created, not evolved.



Fossil fish called *Birkenia* from Scotland. This creature, estimated to be some 420 million years old, is about 4 cm. long.



Fossil shark of the *Stethacanthus* genus, some 330 million years old.



Group of fossil fish from the Mesozoic Age.



110-million-year-old fossil fish from the Santana fossil bed in Brazil.



Fossil fish approximately 360 million years old from the Devonian Age. Called *Osteolepis panderi*, it is about 20 cm. long and closely resembles present-day fish.

## The Origin of Tetrapods

Quadrupeds (or *Tetrapoda*) is the general name given to vertebrate animals dwelling on land. Amphibians, reptiles, birds and mammals are included in this class. The assumption of the theory of evolution regarding quadrupeds holds that these living things evolved from fish living in the sea. However, this claim poses contradictions, in terms of both physiology and anatomy. Furthermore, it lacks any basis in the fossil record.

A fish would have to undergo great modifications to adapt to land. Basically, its respiratory, excretory and skeletal systems would all have to change. Gills would have to change into lungs, fins would have to acquire the features of feet so that they could carry the weight of the body, kidneys and the whole excretory system would have to be transformed to work in a terrestrial environment, and the skin would need to acquire a new texture to prevent water loss. Unless all these things happened, a fish could only survive on land for a few minutes.

So, how does the evolutionist view explain the origin of land-dwelling animals? Some shallow comments in evolutionist literature are mainly based on a **Lamarckian rationale**. For instance, regarding the transformation of fins into feet, they say, "Just when fish started to creep on land, fins gradually became feet." Even Ali Demirsoy, one of the foremost authorities on evolution in Turkey, writes the following: "Maybe the fins of lunged fish changed into amphibian feet as they crept through muddy water."<sup>81</sup>

As mentioned earlier, these comments are based on a Lamarckian rationale, since the comment is essentially based on the improvement of an organ through use and the passing on of this trait to subsequent generations. It seems that the theory postulated by Lamarck, which collapsed a century ago, still has a strong influence on the subconscious minds of evolutionary biologists today.

If we set aside these Lamarckist, and therefore unscientific, scenarios, we have to turn our attention to scenarios based on mutation and natural selection. However, when these mechanisms are examined, it can be seen that the transition from water to land is at a complete impasse.

Let us imagine how a fish might emerge from the sea and adapt itself to the land: If the fish does not undergo a rapid modification in terms of



**The "transition from water to land" scenario, often maintained in evolutionist publications in imaginary diagrams like the one above, is often presented with a Lamarckian rationale, which is clearly pseudoscience.**

its respiratory, excretory and skeletal systems, it will inevitably die. The chain of mutations that needs to come about has to provide the fish with a lung and terrestrial kidneys, immediately. Similarly, this mechanism should transform the fins into feet and provide the sort of skin texture that will hold water inside the body. What is more, this chain of mutations has to take place during the lifespan of one single animal.

No evolutionary biologist would ever advocate such a chain of mutations. The implausible and nonsensical nature of the very idea is obvious. Despite this fact, evolutionists put forward the concept of "preadaptation," which means that fish acquire the traits they will need while they are still in the water. Put briefly, the theory says that fish acquire the traits of land-dwelling animals before they even feel the need for these traits, while they are still living in the sea.

Nevertheless, such a scenario is illogical even when viewed from the standpoint of the theory of evolution. Surely, acquiring the traits of a land-dwelling living animal would not be advantageous for a marine animal. Consequently, the proposition that these traits occurred by means of natural selection rests on no rational grounds. On the contrary, natural selection should eliminate any creature which underwent "preadaptation," since acquiring traits which would enable it to survive on land would surely place it at a disadvantage in the sea.

In brief, the scenario of "transition from sea to land" is at a complete impasse. It is accepted by evolutionists as a miracle of nature that cannot



**There was no "evolutionary" process in the origin of frogs. The oldest known frogs were completely different from fish, and emerged with all their own peculiar features. Frogs in our time possess the same features. There is no difference between the frog found preserved in amber in the Dominican Republic and specimens living today.**

be re-examined. This is why Henry Gee, the editor of *Nature*, considers this scenario as an unscientific story:

Conventional stories about evolution, about 'missing links', are not in themselves testable, because there is only one possible course of events — the one implied by the story. If your story is about how a group of fishes crawled onto land and evolved legs, you are forced to see this as a once-only event, because that's the way the story goes. You can either subscribe to the story or not — there are no alternatives.<sup>82</sup>

The impasse does not only come from the alleged mechanisms of evolution, but also from the fossil record or the study of living tetrapods. Robert Carroll has to admit that "neither the fossil record nor study of development in modern genera yet provides a complete picture of how the paired limbs in tetrapods evolved..."<sup>83</sup>

The classical candidates for transitional forms in alleged fish-tetrapod evolution have been several fish and amphibian genera.

Evolutionist natural historians traditionally refer to coelacanths (and

the closely-related, extinct *Rhipidistians*) as the most probably ancestors of quadrupeds. These fish come under the *Crossopterygian* subclass. Evolutionists invest all their hopes in them simply because their fins have a relatively "fleshy" structure. Yet these fish are not transitional forms; there are huge anatomical and physiological differences between this class and amphibians.



**An *Eusthenopteron foordi* fossil from the Later Devonian Age found in Canada.**

In fact, the alleged "transitional forms" between fish and amphibians are not transitional in the sense that they have very small differences, but in the sense that they can be the best candidates for an evolutionary scenario. Huge anatomical differences exist between the fish most likely to be taken as amphibian ancestors and the amphibians taken to be their descendants. Two examples are *Eusthenopteron* (an extinct fish) and *Acanthostega* (an extinct amphibian), the two favorite subjects for most of the contemporary evolutionary scenarios regarding tetrapod origins. Robert Carroll, in his *Patterns and Processes of Vertebrate Evolution*, makes the following comment about these allegedly related forms:

*Eusthenopteron* and *Acanthostega* may be taken as the end points in the transition between fish and amphibians. Of 145 anatomical features that could be compared between these two genera, 91 showed changes associated with adaptation to life on land... This is far more than the number of changes that occurred in any one of the transitions involving the origin of the fifteen major groups of Paleozoic tetrapods.<sup>84</sup>

Ninety-one differences over 145 anatomical features... And evolutionists believe that all these were redesigned through a process of random mutations in about 15 million years.<sup>85</sup> To believe in such a scenario may be necessary for the sake of evolutionary theory, but it is not scientifically and rationally sound. This is true for all other versions of the fish-amphibian scenario, which differ according to the candidates that are chosen to be the transitional forms. Henry Gee, the editor of *Nature*, makes a similar comment on the scenario based on *Ichthyostega*, another extinct amphibian with very similar characteristics to *Acanthostega*:

## DARWINISM REFUTED

A statement that *Ichthyostega* is a missing link between fishes and later tetrapods reveals far more about our prejudices than about the creature we are supposed to be studying. It shows how much we are imposing a restricted view on reality based on our own limited experience, when reality may be larger, stranger, and more different than we can imagine.<sup>86</sup>

Another remarkable feature of amphibian origins is the abrupt appearance of the three basic amphibian categories. Carroll notes that "The earliest fossils of frogs, caecilians, and salamanders all appear in the Early to Middle Jurassic. All show most of the important attributes of their living descendants."<sup>87</sup> In other words, these animals appeared abruptly and did not undergo any "evolution" since then.

### Speculations About Coelacanths

Fish that come under the coelacanth family were once accepted as strong evidence for transitional forms. Basing their argument on



When they only had fossils of coelacanths, evolutionary paleontologists put forward a number of Darwinist assumptions regarding them; however, when living examples were found, all these assumptions were shattered.

Below, examples of living coelacanths. The picture on the right shows the latest specimen of coelacanth, found in Indonesia in 1998.

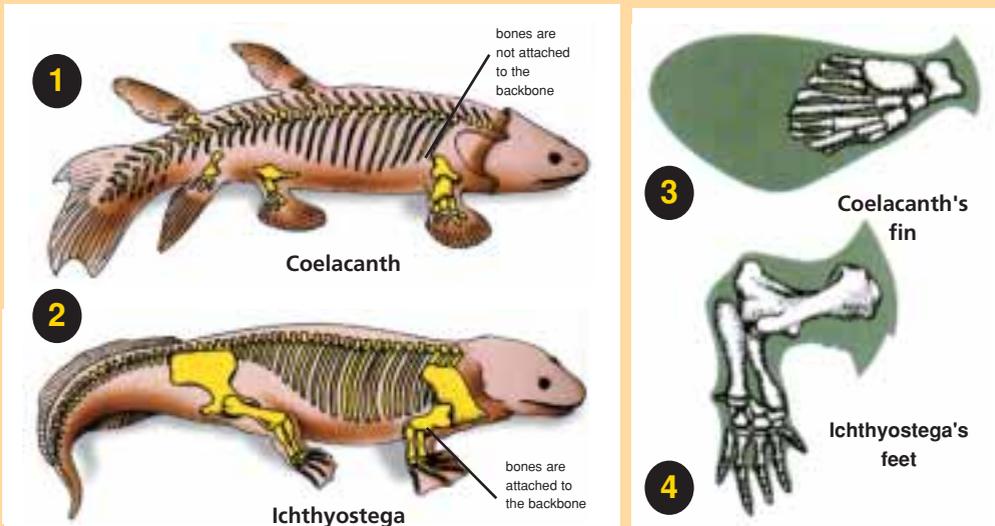


coelacanth fossils, evolutionary biologists proposed that this fish had a primitive (not completely functioning) lung. Many scientific publications stated the fact, together with drawings showing how coelacanths passed to land from water. All these rested on the assumption that the coelacanth was an extinct species.

However on December 22, 1938, a very interesting discovery was made in the Indian Ocean. A living member of the coelacanth family, previously presented as a transitional form that had become extinct 70 million years ago, was caught! The discovery of a "living" prototype of the coelacanth undoubtedly gave evolutionists a severe shock. The evolutionary paleontologist J. L. B. Smith said, "If I'd meet a dinosaur in the street I wouldn't have been more astonished."<sup>88</sup> In the years to come, 200 coelacanths were caught many times in different parts of the world.

Living coelacanths revealed how groundless the speculation regarding them was. Contrary to what had been claimed, coelacanths had

## THE DIFFERENCE BETWEEN FINS AND FEET



The fundamental reason why evolutionists imagine coelacanths and similar fish to be "the ancestor of land animals" is that they have bony fins. They imagine that these gradually turned into feet. However, there is a fundamental difference between fish bones and the feet of land animals such as *Ichthyostega*: As shown in Picture 1, the bones of the coelacanth are not attached to the backbone; however, those of *Ichthyostega* are, as shown in Picture 2. For this reason, the claim that these fins gradually developed into feet is quite unfounded. Furthermore, the structure of the bones in coelacanth fins is very different from that in the bones in *Ichthyostega* feet, as seen in Pictures 3 and 4.

neither a primitive lung nor a large brain. The organ that evolutionist researchers had proposed as a primitive lung turned out to be nothing but a fat-filled swimbladder.<sup>89</sup> Furthermore, the coelacanth, which was introduced as "a reptile candidate preparing to pass from sea to land," was in reality a fish that lived in the depths of the oceans and never approached nearer than 180 meters from the surface.<sup>90</sup>

Following this, the coelacanth suddenly lost all its popularity in evolutionist publications. Peter Forey, an evolutionary paleontologist, says in an article of his in *Nature*:

The discovery of *Latimeria* raised hopes of gathering direct information on the transition of fish to amphibians, for there was then a long-held belief that coelacanths were close to the ancestry of tetrapods. ...But studies of the anatomy and physiology of *Latimeria* have found this theory of relationship to be wanting and the living coelacanth's reputation as a missing link seems unjustified.<sup>91</sup>

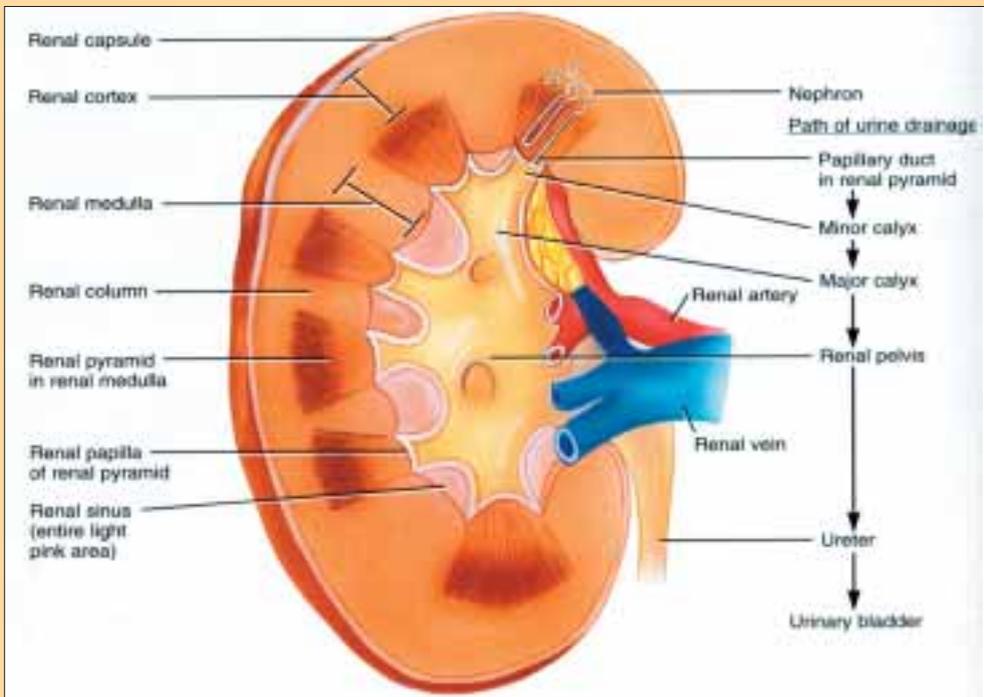
This meant that the only serious claim of a transitional form between fish and amphibians had been demolished.

### **Physical Obstacles to Transition from Water to Land**

The claim that fish are the ancestors of land-dwelling creatures is invalidated by anatomical and physiological observations as much as by the fossil record. When we examine the huge anatomical and physiological differences between water- and land-dwelling creatures, we can see that these differences could not have disappeared in an evolutionary process with gradual changes based on chance. We can list the most evident of these differences as follows

**1- Weight-bearing:** Sea-dwelling creatures have no problem in bearing their own weight in the sea, although the structures of their bodies are not made for such a task on land. However, most land-dwelling creatures consume 40 percent of their energy just in carrying their bodies around. Creatures making the transition from water to land would at the same time have had to develop new muscular and skeletal systems to meet this energy need, and this could not have come about by chance mutations.

The basic reason why evolutionists imagine the coelacanth and



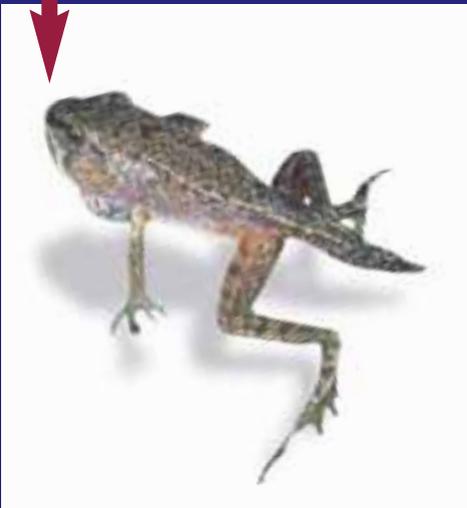
### THE KIDNEY PROBLEM

Fish remove harmful substances from their bodies directly into the water, but land animals need kidneys. For this reason, the scenario of transition from water to the land requires kidneys to have developed by chance.

However, kidneys possess an exceedingly complex structure and, what is more, the kidney needs to be 100 percent present and in complete working order in order to function. A kidney developed 50, or 70, or even 90 percent will serve no function. Since the theory of evolution depends on the assumption that "organs that are not used disappear," a 50 percent-developed kidney will disappear from the body in the first stage of evolution.

similar fish to be the ancestors of land-dwelling creatures is that their fins contain bones. It is assumed that over time these fins turned into load-bearing feet. However, there is a fundamental difference between these fish's bones and land-dwelling creatures' feet. It is impossible for the former to take on a load-bearing function, as they are not linked to the backbone. Land-dwelling creatures' bones, in contrast, are directly connected to the backbone. For this reason, the claim that these fins slowly developed into feet is unfounded.

**2- Heat retention:** On land, the temperature can change quickly, and fluctuates over a wide range. Land-dwelling creatures possess a physical mechanism that can withstand such great temperature changes. However,



## METAMORPHOSIS

Frogs are born in water, live there for a while, and finally emerge onto land in a process known as "metamorphosis." Some people think that metamorphosis is evidence of evolution, whereas the two actually have nothing to do with one another.

The sole innovative mechanism proposed by evolution is mutation. However, metamorphosis does not come about by coincidental effects like mutation does. On the contrary, this change is written in frogs' genetic code. In other words, it is already evident when a frog is first born that it will have a type of body that allows it to live on land. Research carried out in recent years has shown that metamorphosis is a complex process governed by different genes. For instance, just the loss of the tail during this process is governed, according to *Science News* magazine, by more than a dozen genes (*Science News*, July 17, 1999, page 43).

The evolutionists' claim of transition from water to land says that fish, with a genetic code completely designed to allow them to live in water, turned into land creatures as a result of chance mutations. However, for this reason metamorphosis actually tears evolution down, rather than shoring it up, because the slightest error in the process of metamorphosis means the creature will die or be deformed. It is essential that metamorphosis should happen perfectly. It is impossible for such a complex process, which allows no room for error, to have come about by chance mutations, as is claimed by evolution.

in the sea, the temperature changes slowly, and within a narrower range. A living organism with a body system regulated according to the constant temperature of the sea would need to acquire a protective system to ensure minimum harm from the temperature changes on land. It is preposterous to claim that fish acquired such a system by random mutations as soon as they stepped onto land.

**3- Water:** Essential to metabolism, water needs to be used economically due to its relative scarcity on land. For instance, the skin has to be able to permit a certain amount of water loss, while also preventing excessive evaporation. That is why land-dwelling creatures experience thirst, something that sea-dwelling creatures do not do. For this reason, the skin of sea-dwelling animals is not suitable for a nonaquatic habitat.

**4- Kidneys:** Sea-dwelling organisms discharge waste materials, especially ammonia, by means of their aquatic environment: In freshwater fish, most of the nitrogenous wastes (including large amounts of ammonia,  $\text{NH}_3$ ) leave by diffusion out of the gills. The kidney is mostly a device for maintaining water balance in the animal, rather than an organ of excretion. Marine fish have two types. Sharks, skates, and rays may carry very high levels of urea in their blood. Shark's blood may contain 2.5% urea in contrast to the 0.01-0.03% in other vertebrates. The other type, i. e., marine bony fish, are much different. They lose water continuously but replace it by drinking seawater and then desalting it. They rely more on tubular secretion for eliminating excess or waste solutes.

Each of these different excretory systems is very different from those of terrestrial vertebrates. Therefore, in order for the passage from water to land to have occurred, living things without a kidney would have had to develop a kidney system all at once.

**5- Respiratory system:** Fish "breathe" by taking in oxygen dissolved in water that they pass through their gills. They cannot live more than a few minutes out of water. In order to survive on land, they would have to acquire a perfect lung system all of a sudden.

It is most certainly impossible that all these dramatic physiological changes could have happened in the same organism at the same time, and all by chance.

## DIFFERENT EGGS



One of the inconsistencies in the amphibian-reptile evolution scenario is the structure of the eggs. Amphibian eggs, which develop in water, have a jelly-like structure and a porous membrane, whereas reptile eggs, as shown in the reconstruction of a dinosaur egg on the right, are hard and impermeable, in order to conform to conditions on land. In order for an amphibian to become a reptile, its eggs would have to have coincidentally turned into perfect reptile eggs, and yet the slightest error in such a process would lead to the extinction of the species.

### The Origin of Reptiles

Dinosaur, lizard, turtle, crocodile—all these fall under the class of reptiles. Some, such as dinosaurs, are extinct, but the majority of these species still live on the earth. Reptiles possess some distinctive features. For example, their bodies are covered with scales, and they are cold-blooded, meaning they are unable to regulate their body temperatures physiologically (which is why they expose their bodies to sunlight in order to warm up). Most of them reproduce by laying eggs.

Regarding the origin of these creatures, evolution is again at an impasse. Darwinism claims that reptiles evolved from amphibians. However, no discovery to verify such a claim has ever been made. On the contrary, comparisons between amphibians and reptiles reveal that there are huge physiological gaps between the two, and a "half reptile-half

amphibian" would have no chance of survival.

One example of the physiological gaps between these two groups is the different structures of their eggs. Amphibians lay their eggs in water, and their eggs are jelly-like, with a transparent and permeable membrane. Such eggs possess an ideal structure for development in water. Reptiles, on the other hand, lay their eggs on land, and consequently their eggs are designed to survive there. The hard shell of the reptile egg, also known as an "amniotic egg," allows air in, but is impermeable to water. In this way, the water needed by the developing animal is kept inside the egg.

If amphibian eggs were laid on land, they would immediately dry out, killing the embryo. This cannot be explained in terms of evolution, which asserts that reptiles evolved gradually from amphibians. That is because, for life to have begun on land, the amphibian egg must have changed into an amniotic one within the lifespan of a single generation. How such a process could have occurred by means of natural selection and mutation—the mechanisms of evolution—is inexplicable. Biologist Michael Denton explains the details of the evolutionist impasse on this matter:

Every textbook of evolution asserts that reptiles evolved from amphibia but none explains how the major distinguishing adaptation of the reptiles, the amniotic egg, came about gradually as a result of a successive accumulation of small changes. The amniotic egg of the reptile is vastly more complex and utterly different to that of an amphibian. There are hardly two eggs in the whole animal kingdom which differ more fundamentally... The origin of the amniotic egg and the amphibian – reptile transition is just another of the major vertebrate divisions for which clearly worked out evolutionary schemes have never been provided. Trying to work out, for example, how the heart and aortic arches of an amphibian could have been gradually converted to the reptilian and mammalian condition raises absolutely horrendous problems.<sup>92</sup>

Nor does the fossil record provide any evidence to confirm the evolutionist hypothesis regarding the origin of reptiles.

Robert L. Carroll, an evolutionary paleontologist and authority on vertebrate paleontology, is obliged to accept this. He has written in his classic work, *Vertebrate Paleontology and Evolution*, that "The early amniotes are sufficiently distinct from all Paleozoic amphibians that their specific ancestry has not been established."<sup>93</sup> In his newer book, *Patterns and*

*Processes of Vertebrate Evolution*, published in 1997, he admits that "The origin of the modern amphibian orders, (and) the transition between early tetrapods" are "still poorly known" along with the origins of many other major groups.<sup>94</sup>

The same fact is also acknowledged by Stephen Jay Gould:

**No fossil amphibian seems clearly ancestral to the lineage of fully terrestrial vertebrates (reptiles, birds, and mammals).**<sup>95</sup>

So far, the most important animal put forward as the "ancestor of reptiles" has been *Seymouria*, a species of amphibian. However, the fact that *Seymouria* cannot be a transitional form was revealed by the discovery that reptiles existed on earth some 30 million years before *Seymouria* first appeared on it. The oldest *Seymouria* fossils are found in the Lower Permian layer, or 280 million years ago. Yet the oldest known reptile species, *Hylonomus and Paleothyris*, were found in lower Pennsylvanian layers, making them some 315-330 million years old.<sup>96</sup> It is surely implausible, to say the least, that the "ancestor of reptiles" lived much later than the first reptiles.

In brief, contrary to the evolutionist claim that living beings evolved gradually, scientific facts reveal that they appeared on earth suddenly and fully formed.



#### **THE SEYMOURIA MISTAKE**

Evolutionists at one time claimed that the *Seymouria* fossil on the left was a transitional form between amphibians and reptiles.

According to this scenario, *Seymouria* was "the primitive ancestor of reptiles." However, subsequent fossil discoveries showed that reptiles were living on earth some 30 million years before *Seymouria*. In the light of this, evolutionists had to put an end to their comments regarding *Seymouria*.

## Snakes and Turtles

Furthermore, there are impassable boundaries between very different orders of reptiles such as snakes, crocodiles, dinosaurs, and lizards. Each one of these different orders appears all of a sudden in the fossil record, and with very different structures. Looking at the structures in these very different groups, evolutionists go on to imagine the evolutionary processes that might have happened. But these hypotheses are not reflected in the fossil record. For instance, one widespread evolutionary assumption is that snakes evolved from lizards which gradually lost their legs. But evolutionists are unable to answer the question of what "advantage" could accrue to a lizard which had gradually begun to lose its legs, and how this creature could be "preferred" by natural selection.

It remains to say that the oldest known snakes in the fossil record have no "intermediate form" characteristics, and are no different from snakes of our own time. The oldest known snake fossil is *Dinilysia*, found in Upper Cretaceous rocks in South America. Robert Carroll accepts that this creature "shows a fairly advanced stage of evolution of these features [the specialized features of the skull of snakes],"<sup>97</sup> in other words that it already possesses all the characteristics of modern snakes.

Another order of reptile is turtles, which emerge in the fossil record together with the shells which are so characteristic of them.

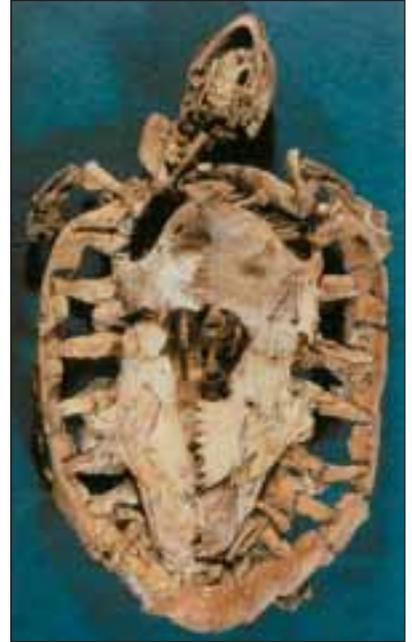
Evolutionist sources state that "Unfortunately, the origin of this highly successful order is obscured by the lack of early fossils, although **turtles** leave more and better fossil remains than do other vertebrates. By the middle of the Triassic Period (about 200,000,000 years ago) turtles were numerous and in possession of basic turtle characteristics... Intermediates between turtles and cotylosaurs, the primitive reptiles from which turtles probably sprang, are entirely lacking."<sup>98</sup>



An approximately 50 million-year-old python fossil of the genus *Palaeopython*.



Above, a freshwater turtle, some 45 million years old, found in Germany. On the right the remains of the oldest known marine turtle. This 110-million-year-old fossil, found in Brazil, is identical to specimens living today.



Thus Robert Carroll is also forced to mention the origin of turtles among the "**important transitions and radiations still poorly known.**"<sup>99</sup>

All these types of living things emerged suddenly and independently. This fact is a scientific proof that they were created.

### **Flying Reptiles**

One interesting group within the reptile class are flying reptiles. These first emerged some 200 million years ago in the Upper Triassic, but subsequently became extinct. These creatures were all reptiles, because they possessed all the fundamental characteristics of the reptile class. They were cold-blooded (i.e., they could not regulate their own internal heat) and their bodies were covered in scales. But they possessed powerful wings, and it is thought that these allowed them to fly.

Flying reptiles are portrayed in some popular evolutionist publications as paleontological discoveries that support Darwinism—at least, that is the impression given. However, the origin of flying reptiles is

actually a real problem for the theory of evolution. The clearest indication of this is that flying reptiles emerged suddenly and fully formed, with no intermediate form between them and terrestrial reptiles. Flying reptiles possessed very well designed wings, which no terrestrial reptile possesses. No half-winged creature has ever been encountered in the fossil record.

In any case, no half-winged creature could have lived, because if these imaginary creatures had existed, they would have been at a grave disadvantage compared to other reptiles, having lost their front legs but being still unable to fly. In that event, according to evolution's own rules, they would have been eliminated and become extinct.

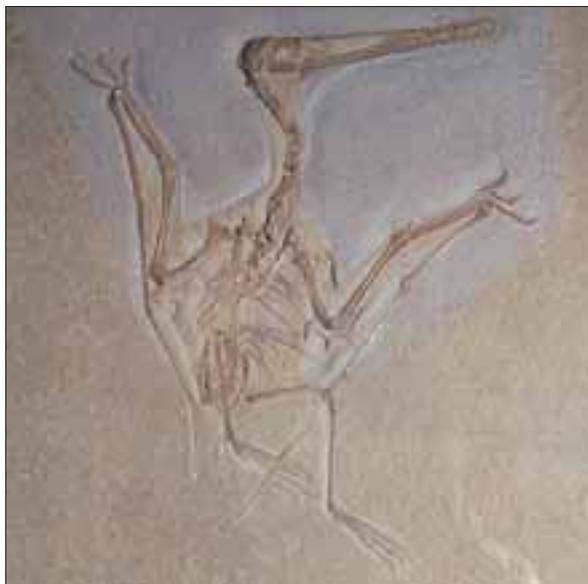
In fact, when flying reptiles' wings are examined, they have such a flawless design that this could never be accounted for by evolution. Just as other reptiles have five toes on their front feet, flying reptiles have five digits on their wings. But the **fourth finger** is some 20 times longer than the others, and the wing stretches out under that finger. If terrestrial reptiles had evolved into flying reptiles, then this fourth finger



**A *Eudimorphodon* fossil, one of the oldest species of flying reptiles. This specimen, found in northern Italy, is some 220 million years old.**

must have grown gradually step by step, as time passed. Not just the fourth finger, but the whole structure of the wing, must have developed with chance mutations, and this whole process would have had to bring some advantage to the creature. Duane T. Gish, one of the foremost critics of the theory of evolution on the paleontological level, makes this comment:

The very notion that a land reptile could have gradually been converted into a flying reptile is absurd. The incipient, part-way evolved structures, rather than conferring advantages to the intermediate stages, would have been a great disadvantage. For example, evolutionists suppose that, strange as it may seem, mutations occurred that affected only the fourth fingers a little bit



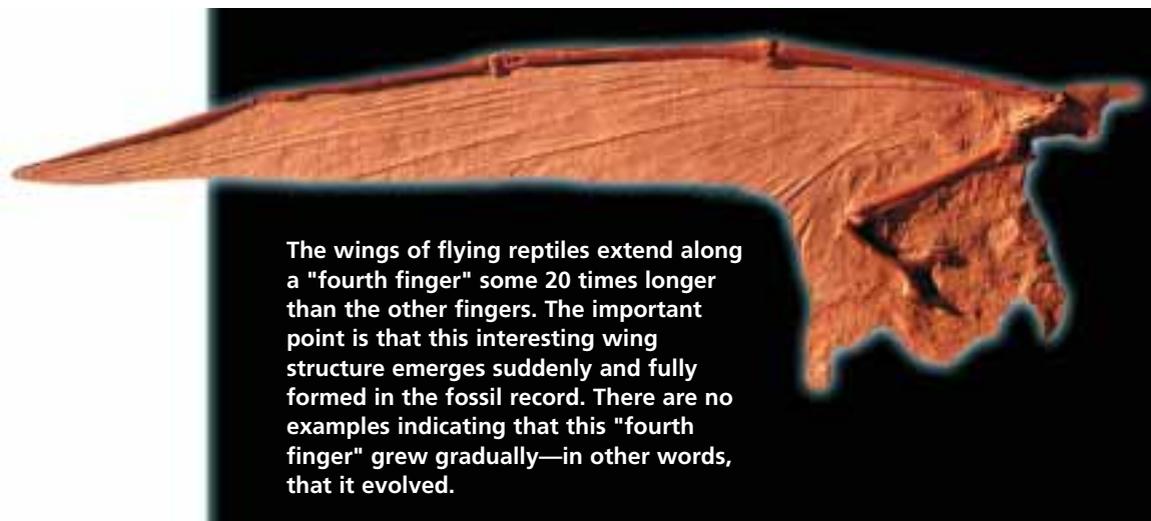
A fossil flying reptile of the species *Pterodactylus kochi*. This specimen, found in Bavaria, is about 240 million years old.

at a time. Of course, other random mutations occurring concurrently, incredible as it may seem, were responsible for the gradual origin of the wing membrane, flight muscles, tendons, nerves, blood vessels, and other structures necessary to form the wings. At some stage, the developing flying reptile would have had about 25 percent wings. This strange creature would never survive, however. What good are 25 percent wings? Obviously the creature could not fly, and he could no longer run...<sup>100</sup>

In short, it is impossible to account for the origin of flying reptiles with the mechanisms of Darwinian evolution. And in fact the fossil record reveals that no such evolutionary process took place. Fossil layers contain only land reptiles like those we know today, and perfectly developed flying reptiles. There is no intermediate form. Carroll, who is one of the most respected names in the world in the field of vertebrate paleontology, makes the following admission as an evolutionist:

...all the Triassic pterosaurs were highly specialized for flight... They provide little evidence of their specific ancestry and **no evidence of earlier stages in the origin of flight.**<sup>101</sup>

Carroll, more recently, in his *Patterns and Processes of Vertebrate Evolution*, counts the origin of pterosaurs among the important transitions about which not much is known.<sup>102</sup>



The wings of flying reptiles extend along a "fourth finger" some 20 times longer than the other fingers. The important point is that this interesting wing structure emerges suddenly and fully formed in the fossil record. There are no examples indicating that this "fourth finger" grew gradually—in other words, that it evolved.

To put it briefly, there is no evidence for the evolution of flying reptiles. Because the term "reptile" means only land-dwelling reptiles for most people, popular evolutionist publications try to give the impression regarding flying reptiles that reptiles grew wings and began to fly. However, the fact is that both land-dwelling and flying reptiles emerged with no evolutionary relationship between them.

## Marine Reptiles

Another interesting category in the classification of reptiles is marine reptiles. The great majority of these creatures have become extinct, although turtles are an example of one group that survives. As with flying reptiles, the origin of marine reptiles is something that cannot be explained with an evolutionary approach. The most important known marine reptile is the creature known as the ichthyosaur. In their book *Evolution of the Vertebrates*, Edwin H. Colbert and Michael Morales admit the fact that no evolutionary account of the origin of these creatures can be given:

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...** The basic problem of ichthyosaur relationships is that no conclusive evidence can be found for linking these reptiles with any other reptilian order.<sup>103</sup>



Fossil ichthyosaur of the genus *Stenopterygius*, about 250 million years old.

Similarly, Alfred S. Romer, another expert on the natural history of vertebrates, writes:

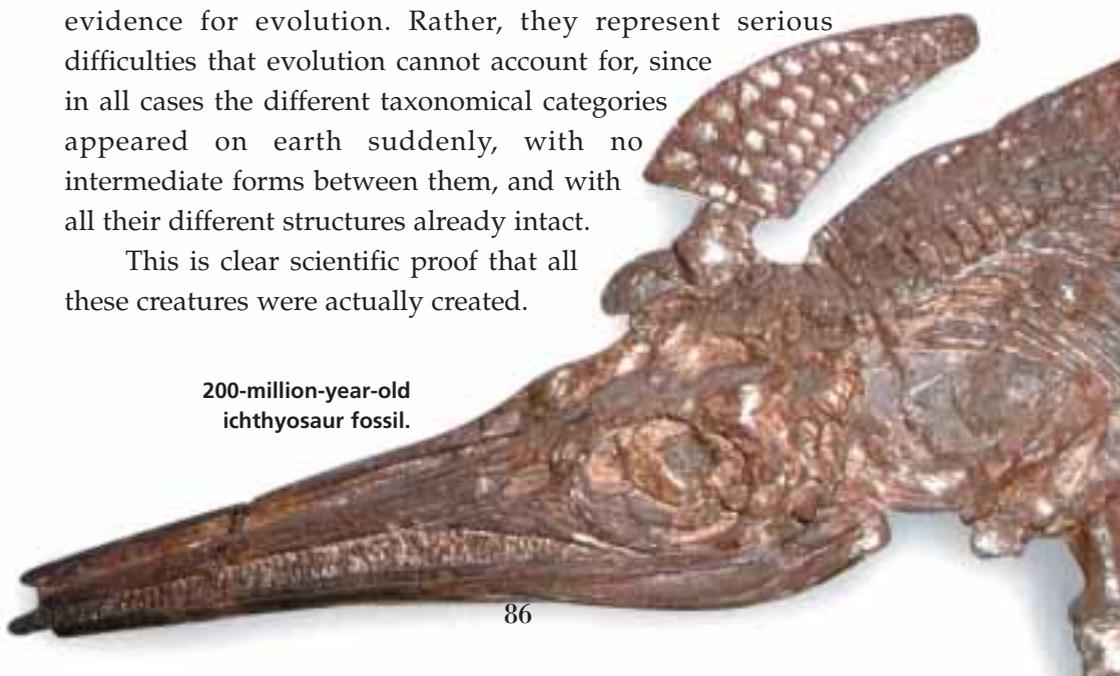
No earlier forms [of ichthyosaurs] are known. The peculiarities of ichthyosaur structure would seemingly require a long time for their development and hence a very early origin for the group, but there are **no known Permian reptiles antecedent to them.**<sup>104</sup>

Carroll again has to admit that the origin of ichthyosaurs and nothosaurs (another family of aquatic reptiles) are among the many "poorly known" cases for evolutionists.<sup>105</sup>

In short, the different creatures that fall under the classification of reptiles came into being on the earth with no evolutionary relationship between them. As we shall see in due course, the same situation applies to mammals: there are flying mammals (bats) and marine mammals (dolphins and whales). However, these different groups are far from being evidence for evolution. Rather, they represent serious difficulties that evolution cannot account for, since in all cases the different taxonomical categories appeared on earth suddenly, with no intermediate forms between them, and with all their different structures already intact.

This is clear scientific proof that all these creatures were actually created.

200-million-year-old ichthyosaur fossil.



# TRUE NATURAL HISTORY – II

## (BIRDS AND MAMMALS)

There are thousands of bird species on the earth. Every one of them possesses distinct features. For example, falcons have acute vision, wide wings and sharp talons, while hummingbirds, with their long beaks, suck the nectar of flowers.

Others migrate over long distances to very specific places in the world. But the most important feature distinguishing birds from other animals is flight. Most birds have the ability to fly.

How did birds come into existence? The theory of evolution tries to provide an answer with a long scenario. According to this story, reptiles are the ancestors of birds. Approximately 150-200 million years ago, birds evolved from their reptile ancestors. The first birds had very poor flying skills. Yet, during the evolution process, feathers replaced the thick skins of these ancient birds, which were originally covered with scales. Their front legs were also completely covered by feathers, and changed into wings. As a result of gradual evolution, some reptiles adapted themselves to flight, and thus became the birds of today.

This scenario is presented in evolutionary sources as an established fact. However, an in-depth study of the details and the scientific data indicates that the scenario is based more on imagination than reality.

### **The Origin of Flight According to Evolutionists**

How reptiles, as land-dwelling creatures, ever came to fly, is an issue which has stirred up considerable speculation among evolutionists. There are two main theories. The first argues that the ancestors of birds

descended to the ground from the trees. As a result, these ancestors are alleged to be reptiles that lived in the treetops and came to possess wings gradually as they jumped from one branch to another. This is known as the **arboreal theory**. The other, the **cursorial (or "running") theory**, suggests that birds progressed to the air from the land.

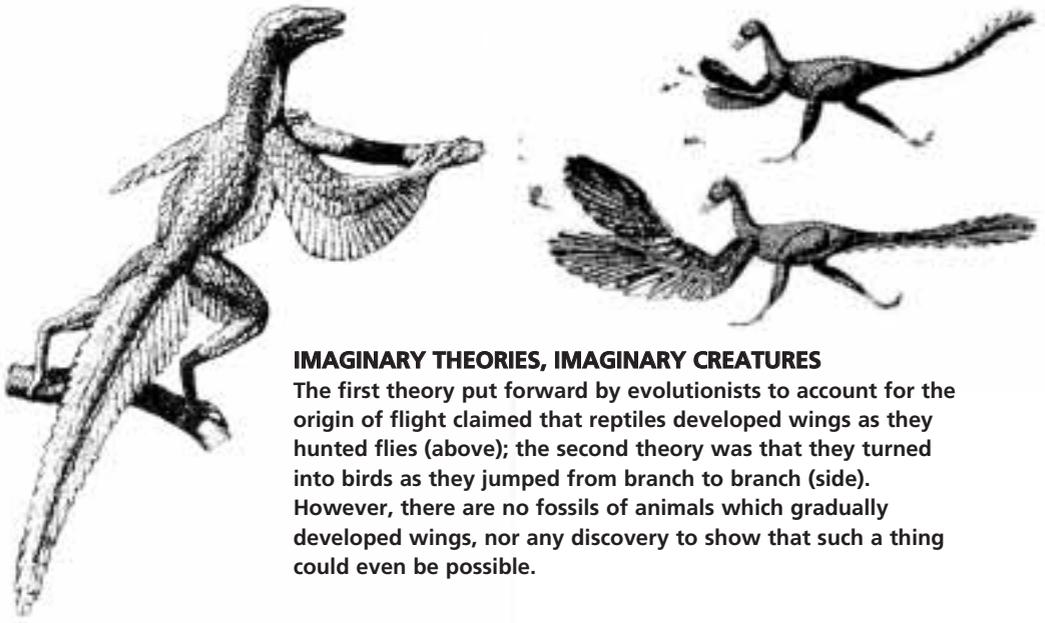
Yet both of these theories rest upon speculative interpretations, and there is no evidence to support either of them. Evolutionists have devised a simple solution to the problem: they simply imagine that the evidence exists. Professor John Ostrom, head of the Geology Department at Yale University, who proposed the cursorial theory, explains this approach:

No fossil evidence exists of any pro-avis. It is a purely hypothetical pre-bird, but one that must have existed.<sup>106</sup>

However, this transitional form, which the arboreal theory assumes "must have lived," has never been found. The cursorial theory is even more problematic. The basic assumption of the theory is that the front legs of some reptiles gradually developed into wings as they waved their arms around in order to catch insects. However, no explanation is provided of how the wing, a highly complex organ, came into existence as a result of this flapping.

One huge problem for the theory of evolution is the irreducible complexity of wings. Only a perfect design allows wings to function, a "half-way developed" wing cannot function. In this context, the "gradual development" model—the unique mechanism postulated by evolution—makes no sense. Thus Robert Carroll is forced to admit that, "It is difficult to account for the initial evolution of feathers as elements in the flight apparatus, since it is hard to see how they could function until they reached the large size seen in *Archaeopteryx*."<sup>107</sup> Then he argues that feathers could have evolved for insulation, but this does not explain their complex design which is specifically shaped for flying.

It is essential that wings should be tightly attached to the chest, and possess a structure able to lift the bird up and enable it to move in all directions, as well as allowing it to remain in the air. It is essential that wings and feathers possess a light, flexible and well proportioned structure. At this point, evolution is again in a quandary. It fails to answer the question of how this flawless design in wings came about as the result of accumulative random mutations. Similarly, it offers no explanation of



### **IMAGINARY THEORIES, IMAGINARY CREATURES**

The first theory put forward by evolutionists to account for the origin of flight claimed that reptiles developed wings as they hunted flies (above); the second theory was that they turned into birds as they jumped from branch to branch (side). However, there are no fossils of animals which gradually developed wings, nor any discovery to show that such a thing could even be possible.

how the foreleg of a reptile came to change into a perfect wing as a result of a defect (mutation) in the genes.

A half-formed wing cannot fly. Consequently, even if we assume that mutation did lead to a slight change in the foreleg, it is still entirely unreasonable to assume that further mutations contributed coincidentally to the development of a full wing. That is because a mutation in the forelegs will not produce a new wing; on the contrary, it will just cause the animal to lose its forelegs. This would put it at a disadvantage compared to other members of its own species. According to the rules of the theory of evolution, natural selection would soon eliminate this flawed creature.

According to biophysical research, mutations are changes that occur very rarely. Consequently, it is impossible that a disabled animal could wait millions of years for its wings to fully develop by means of slight mutations, especially when these mutations have damaging effects over time...

## **Birds and Dinosaurs**

The theory of evolution holds that birds evolved from carnivorous theropods. However, a comparison between birds and reptiles reveals that the two have very distinct features, making it unlikely that one evolved from the other.

There are various structural differences between birds and reptiles,

one of which concerns bone structure. Due to their bulky natures, dinosaurs—the ancestors of birds according to evolutionists—had thick, solid bones. Birds, in contrast, whether living or extinct, have hollow bones that are very light, as they must be in order for flight to take place.

Another difference between reptiles and birds is their metabolic structure. Reptiles have the slowest metabolic structure in the animal kingdom. (The claim that dinosaurs had a warm-blooded fast metabolism remains a speculation.) Birds, on the other hand, are at the opposite end of the metabolic spectrum. For instance, the body temperature of a sparrow can rise to as much as 48°C due to its fast metabolism. On the other hand, reptiles lack the ability to regulate their body temperature. Instead, they expose their bodies to sunlight in order to warm up. Put simply, reptiles consume the least energy of all animals and birds the most.

One of the best-known ornithologists in the world, Alan Feduccia from the University of North Carolina, opposes the theory that birds are related to dinosaurs, despite the fact that he is an evolutionist himself. Feduccia has this to say regarding the thesis of reptile-bird evolution:

Well, I've studied bird skulls for 25 years and I don't see any similarities whatsoever. I just don't see it... The theropod origins of birds, in my opinion, will be the greatest embarrassment of paleontology of the 20th century.<sup>108</sup>

Larry Martin, a specialist on ancient birds from the University of Kansas, also opposes the theory that birds are descended from dinosaurs. Discussing the contradiction that evolution falls into on the subject, he states:

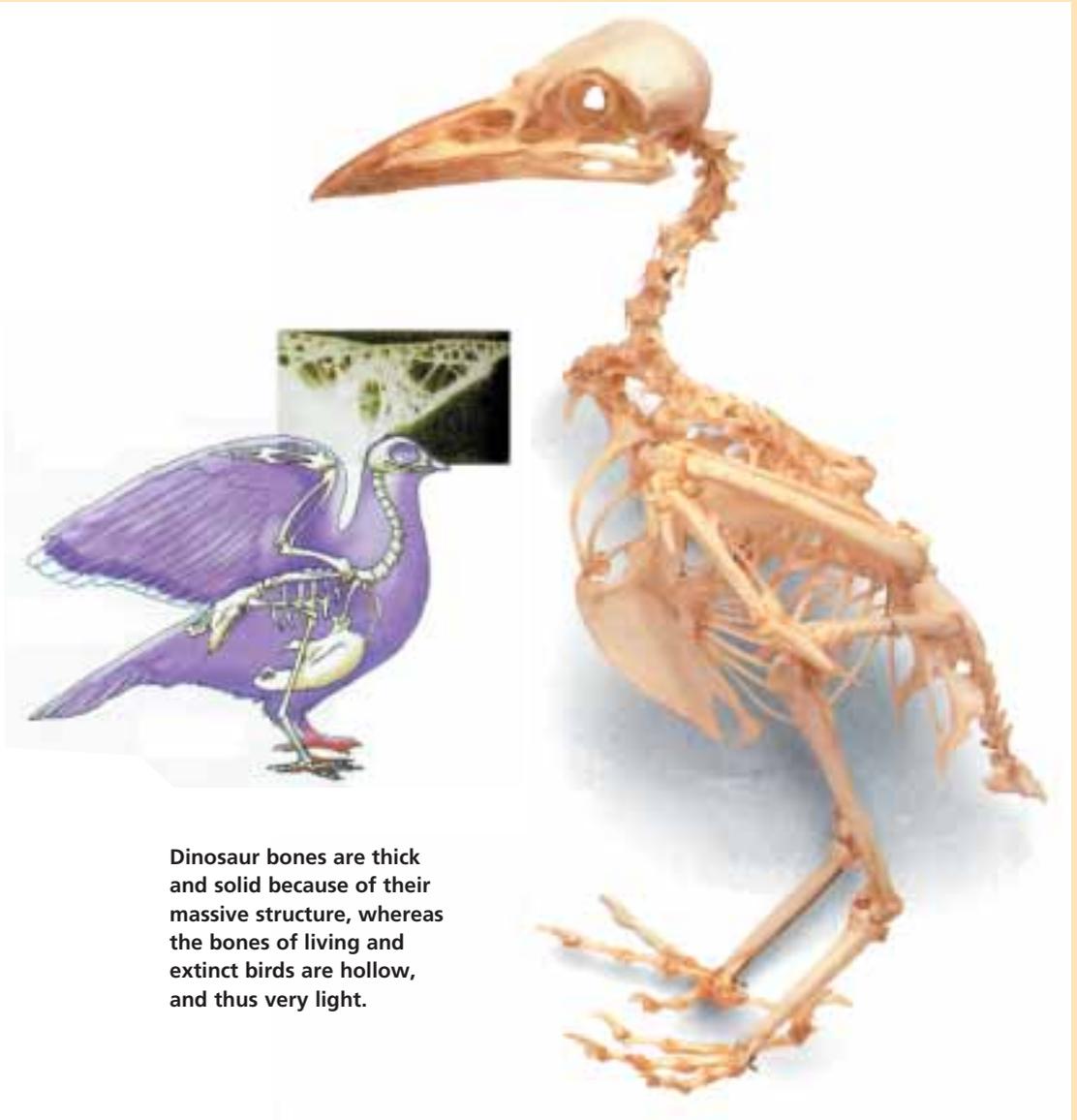
To tell you the truth, if I had to support the dinosaur origin of birds with those characters, I'd be embarrassed every time I had to get up and talk about it.<sup>109</sup>

Yet, despite all the scientific findings, the groundless scenario of "dinosaur-bird evolution" is still insistently advocated. Popular publications are particularly fond of the scenario. Meanwhile, concepts which provide no backing for the scenario are presented as evidence for "dinosaur-bird evolution."

In some evolutionist publications, for instance, emphasis is laid on the differences among dinosaur hip bones to support the thesis that birds are descended from dinosaurs. These so-called differences exist between

# BIRDS' UNIQUE SKELETAL SYSTEM

Unlike dinosaur and reptile bones, bird bones are hollow. This gives the body stability and lightness. Birds' skeletal structure is employed in designing airplanes, bridges and modern structures.



Dinosaur bones are thick and solid because of their massive structure, whereas the bones of living and extinct birds are hollow, and thus very light.

dinosaurs classified as *Saurischian* (reptile-like, hip-girdled species) and *Ornithischian* (bird-like, hip-girdled species). This concept of dinosaurs having hip girdles similar to those of birds is now and then taken as evidence for the alleged dinosaur–bird link. However, the difference in hip girdles is no evidence at all for the claim that birds evolved from dinosaurs. That is because *Ornithischian* dinosaurs do not resemble birds with respect to other anatomical features. For instance, *Ankylosaurus* is a dinosaur classified as *Ornithischian*, with short legs, a giant body, and skin covered with scales resembling armor. On the other hand, *Struthiomimus*, which resembles birds in some of its anatomical features (long legs, short forelegs, and thin structure), is actually a *Saurischian*.<sup>110</sup>

In short, the structure of the hip girdle is no evidence for an evolutionary relationship between birds and dinosaurs. The claim that dinosaurs resemble birds because their hip girdles are similar ignores other significant anatomical differences between the two species which make any evolutionary link between them untenable from the evolutionist viewpoint.

### **The Unique Structure of Avian Lungs**

Another factor demonstrating the impossibility of the reptile-bird evolution scenario is the structure of avian lungs, which cannot be accounted for by evolution.

In land-dwelling creatures, air flow is bidirectional. Upon inhaling, the air travels through the passages in the lungs (bronchial tubes), ending in tiny air sacs (alveoli). The exchange of oxygen and carbon dioxide takes place here. Then, upon exhaling, this used air makes its way back and finds its way out of the lung by the same route.

In birds however, air is unidirectional. New air comes in one end, and the used air goes at the other end. Thanks to special air sacs all along the passages between them, air always flows in one direction through the avian lung. In this way, birds are able to take in air nonstop. This satisfies birds' high energy requirements. This highly specialized respiratory system is explained by Michael Denton in his book *A Theory in Crisis*:

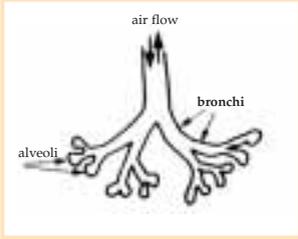
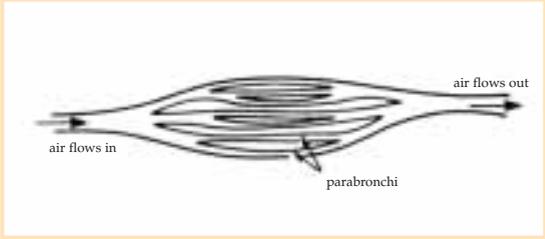
In the case of birds, the major bronchi break down into tiny tubes which permeate the lung tissue. These so-called parabronchi eventually join up

together again, forming a true circulatory system so that air flows in one direction through the lungs. ...[T]he structure of the lung in birds and the overall functioning of the respiratory system is quite unique. No lung in any other vertebrate species is known which in any way approaches the avian system. Moreover, it is identical in all essential details in birds as diverse as humming birds, ostriches and hawks.<sup>111</sup>

The important thing is that the reptile lung, with its bidirectional air flow, could not have evolved into the bird lung with its unidirectional flow, because it is not possible for there to have been an intermediate model between them. In order for a creature to live, it has to keep breathing, and a reversal of the structure of its lungs with a change of design would inevitably end in death. According to evolution, this change must happen gradually over millions of years, whereas a creature whose lungs do not work will die within a few minutes.

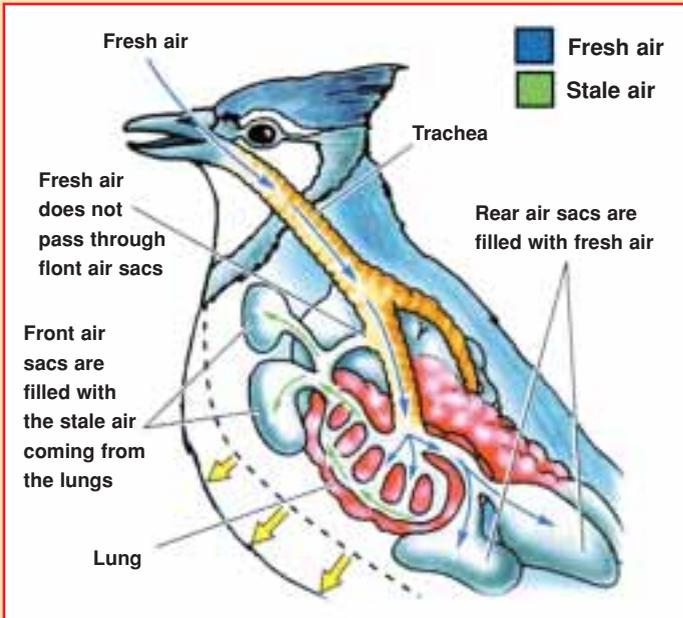
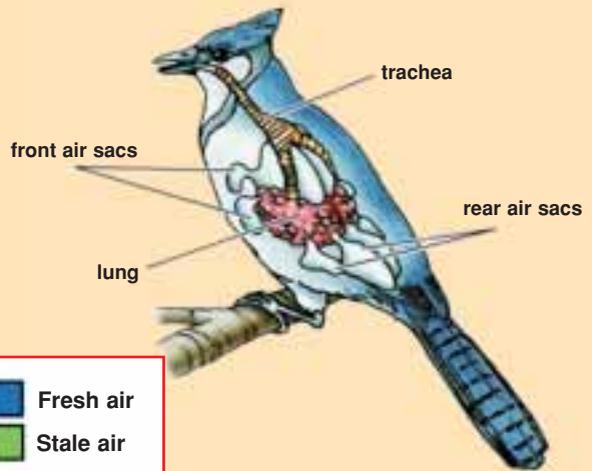
Molecular biologist Michael Denton, from the University of Otago in New Zealand, states that it is impossible to give an evolutionary account of the avian lung:

**Just how such an utterly different respiratory system could have evolved gradually from the standard vertebrate design is fantastically difficult to**

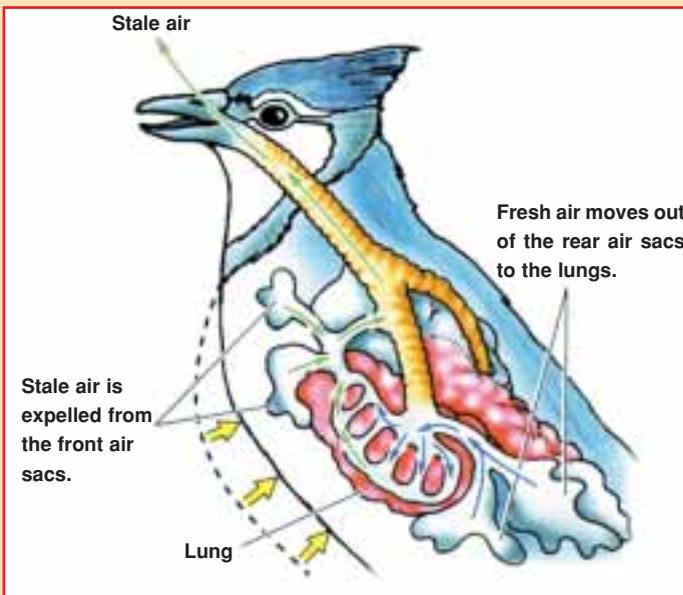
REPTILE LUNG	AVIAN LUNG
	

**Bird lungs function in a way that is completely contrary to the way the lungs of land animals function. The latter inhale and exhale through the same passages. The air in bird lungs, in contrast, passes continuously through the lung in one direction. This is made possible by special air sacs throughout the lung. Thanks to this system, whose details can be seen overleaf, birds breathe nonstop. This design is peculiar to birds, which need high levels of oxygen during flight. It is impossible for this structure to have evolved from reptile lungs, because any creature with an "intermediate" form between the two types of lung would be unable to breathe.**

# BIRDS' SPECIAL RESPIRATORY SYSTEM



**BREATHING IN:** The air which enters birds' respiratory passages goes to the lungs, and to air sacs behind them. The air which is used is transferred to air sacs at the front.



**BREATHING OUT:** When a bird breathes out, the fresh air in the rear air sacs goes into the lungs. With this system, the bird is able to enjoy a constant supply of fresh air to its lungs. There are many details in this lung system, which is shown in very simplified form in these diagrams. For instance, there are special valves where the sacs join the lungs, which enable the air to flow in the right direction. All of these show that there is a clear design at work here. This design not only deals a death blow to the theory of evolution, it is also clear proof of creation.

**envisage**, especially bearing in mind that the maintenance of respiratory function is absolutely vital to the life of an organism to the extent that the slightest malfunction leads to death within minutes. Just as the feather cannot function as an organ of flight until the hooks and barbules are coadapted to fit together perfectly, so the avian lung cannot function as an organ of respiration until the parabronchi system which permeates it and the air sac system which guarantees the parabronchi their air supply are both highly developed and able to function together in a perfectly integrated manner.<sup>112</sup>

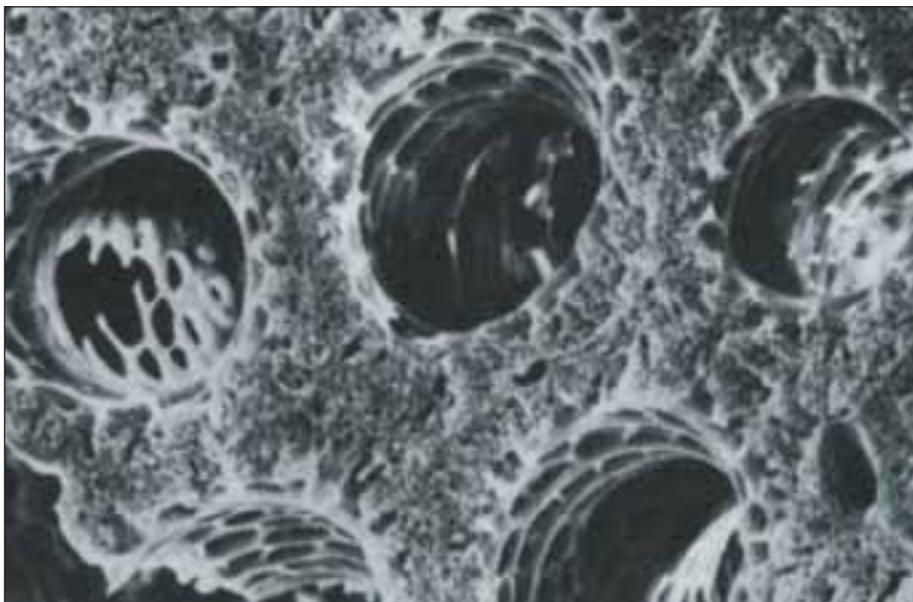
In brief, the passage from a terrestrial lung to an avian lung is impossible, because an intermediate form would serve no purpose.

Another point that needs to be mentioned here is that reptiles have a diaphragm-type respiratory system, whereas birds have an abdominal air sac system instead of a diaphragm. These different structures also make any evolution between the two lung types impossible, as John Ruben, an acknowledged authority in the field of respiratory physiology, observes in the following passage:

The earliest stages in the derivation of the avian abdominal air sac system from a diaphragm-ventilating ancestor would have necessitated selection for a diaphragmatic hernia in taxa transitional between theropods and birds. Such a debilitating condition would have immediately compromised the entire pulmonary ventilatory apparatus and seems unlikely to have been of any selective advantage.<sup>113</sup>

Another interesting structural design of the avian lung which defies evolution is the fact that it is never empty of air, and thus never in danger of collapse. Michael Denton explains the position:

Just how such a different respiratory system could have evolved gradually from the standard vertebrate design without some sort of direction is, again, very difficult to envisage, especially bearing in mind that the maintenance of respiratory function is absolutely vital to the life of the organism. Moreover, the unique function and form of the avian lung necessitates a number of additional unique adaptations during avian development. As H. R. Dunker, one of the world's authorities in this field, explains, because first, the avian lung is fixed rigidly to the body wall and cannot therefore expand in volume and, second, because of the small diameter of the lung capillaries and the resulting high surface tension of any liquid within them, the avian lung cannot be inflated out of a collapsed state as happens in all other vertebrates



**Parabronchial tubes, which enable air to circulate in the right direction in birds' lungs. Each of these tubes is just 0.5 mm. in diameter.**

after birth. The air capillaries are never collapsed as are the alveoli of other vertebrate species; rather, as they grow into the lung tissue, the parabronchi are from the beginning open tubes filled with either air or fluid.<sup>114</sup>

In other words, the passages in birds' lungs are so narrow that the air sacs inside their lungs cannot fill with air and empty again, as with land-dwelling creatures.

If a bird lung ever completely deflated, the bird would never be able to re-inflate it, or would at the very least have great difficulty in doing so. For this reason, the air sacs situated all over the lung enable a constant passage of air to pass through, thus protecting the lungs from deflating.

Of course this system, which is completely different from the lungs of reptiles and other vertebrates, and is based on the most sensitive equilibrium, cannot have come about with unconscious mutations, stage by stage, as evolution maintains. This is how Denton describes this structure of the avian lung, which again invalidates Darwinism:

The avian lung brings us very close to answering Darwin's challenge: "If it could be demonstrated that any complex organ existed, which could not possibly have been formed by numerous, successive, slight modifications, my theory would absolutely break down."<sup>115</sup>

## **Bird Feathers and Reptile Scales**

Another impassable gulf between birds and reptiles is feathers, which are peculiar to birds. Reptile bodies are covered with scales, and those of birds with feathers. The hypothesis that bird feathers evolved from reptile scales is completely unfounded, and is indeed disproved by the fossil record, as the evolutionary paleontologist Barbara Stahl admits:

How [feathers] arose initially, presumably from reptiles scales, defies analysis... It seems, from the complex construction of feathers, that their evolution from reptilian scales would have required an immense period of time and involved a series of intermediate structures. **So far, the fossil record does not bear out that supposition.**<sup>116</sup>

A. H. Brush, a professor of physiology and neurobiology at the University of Connecticut, accepts this reality, although he is himself an evolutionist: "Every feature from gene structure and organization, to development, morphogenesis and tissue organization is different [in feathers and scales]."<sup>117</sup> Moreover, Professor Brush examines the protein structure of bird feathers and argues that it is "unique among vertebrates."<sup>118</sup>

There is no fossil evidence to prove that bird feathers evolved from reptile scales. On the contrary, feathers appear suddenly in the fossil record, Professor Brush observes, as an "undeniably unique" character distinguishing birds.<sup>119</sup> Besides, in reptiles, no epidermal tissue has yet been detected that provides a starting point for bird feathers.<sup>120</sup>

### **REPTILE SCALES**

The scales that cover reptiles' bodies are totally different from bird feathers. Unlike feathers, scales do not extend under the skin, but are merely a hard layer on the surface of the animal's body. Genetically, biochemically and anatomically, scales bear no resemblance to feathers. This great difference between the two again shows that the scenario of evolution from reptiles to birds is unfounded.



Many fossils have so far been the subject of "feathered dinosaur" speculation, but detailed study has always disproved it. The prominent ornithologist Alan Feduccia writes the following in an article called "On Why Dinosaurs Lacked Feathers":

Feathers are features unique to birds, and there are no known intermediate structures between **reptilian scales and feathers**. Notwithstanding speculations on the nature of the elongated scales found on such forms as *Longisquama* ... as being featherlike structures, **there is simply no demonstrable evidence that they in fact are.**<sup>121</sup>



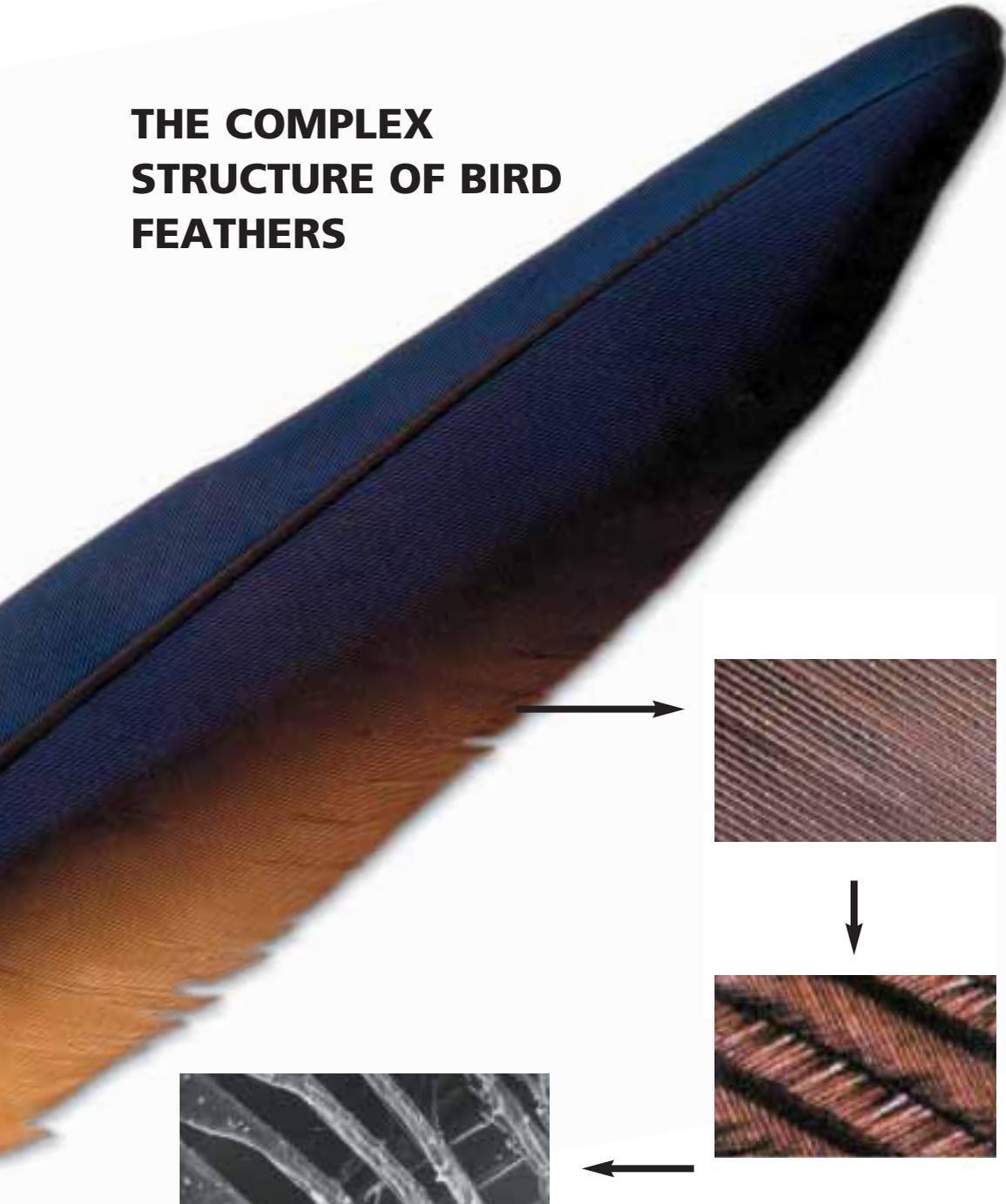
The *Sinosauropteryx* fossil, announced by evolutionary paleontologists to be a "feathered dinosaur," but which subsequently turned out to be no such thing.

## The Design of Feathers

On the other hand, there is such a complex design in bird feathers that the phenomenon can never be accounted for by evolutionary processes. As we all know, there is a shaft that runs up the center of the feather. Attached to the shaft are the vanes. The vane is made up of small thread-like strands, called barbs. These barbs, of different lengths and rigidity, are what give the bird its aerodynamic nature. But what is even more interesting is that each barb has thousands of even smaller strands attached to them called barbules. The barbules are connected to barbicels, with tiny microscopic hooks, called hamuli. Each strand is hooked to an opposing strand, much like the hooks of a zipper.

Just one crane feather has about 650 barbs on each of side of the shaft. About 600 barbules branch off the barbs. Each one of these barbules are locked together with 390 hooklets. The hooks latch together as do the teeth on both sides of a zip. If the hooklets come apart for any reason, the bird can easily restore the feathers to their original form by either shaking itself or by straightening its feathers out with its beak.

# THE COMPLEX STRUCTURE OF BIRD FEATHERS



When bird feathers are studied closely, a very delicate design emerges. There are even tinier hairs on every tiny hair, and these have special hooks, allowing them to hold onto each other. The pictures show progressively enlarged bird feathers.

To claim that the complex design in feathers could have come about by the evolution of reptile scales through chance mutations is quite simply a dogmatic belief with no scientific foundation. Even one of the doyens of Darwinism, Ernst Mayr, made this confession on the subject some years ago:

It is a considerable strain on one's credulity to assume that finely balanced systems such as certain sense organs (the eye of vertebrates, or the bird's feather) could be improved by random mutations.<sup>122</sup>

The design of feathers also compelled Darwin to ponder them. Moreover, the perfect aesthetics of the peacock's feathers had made him "sick" (his own words). In a letter he wrote to Asa Gray on April 3, 1860, he said, "I remember well the time when the thought of the eye made me cold all over, but I have got over this stage of complaint..." And then continued: "... and now trifling particulars of structure often make me very uncomfortable. The sight of a feather in a peacock's tail, whenever I gaze at it, makes me sick!"<sup>123</sup>

In short, the enormous structural differences between bird feathers and reptile scales, and the unbelievably complex design of feathers, clearly demonstrate the baselessness of the claim that feathers evolved from scales.

### **The *Archaeopteryx* Misconception**

In response to the question whether there is any fossil evidence for "reptile-bird evolution," evolutionists pronounce the name of one single creature. This is the fossil of a bird called *Archaeopteryx*, one of the most widely known so-called transitional forms among the very few that evolutionists still defend.

*Archaeopteryx*, the so-called ancestor of modern birds according to evolutionists, lived approximately 150 million years ago. The theory holds that some small dinosaurs, such as *Velociraptors* or *Dromaeosaurs*, evolved by acquiring wings and then starting to fly. Thus, *Archaeopteryx* is assumed to be a transitional form that branched off from its dinosaur ancestors and started to fly for the first time.

However, the latest studies of *Archaeopteryx* fossils indicate that this explanation lacks any scientific foundation. This is absolutely not a



**One of the important pieces of evidence that *Archaeopteryx* was a flying bird is its asymmetric feather structure. Above, one of the creature's fossil feathers.**

transitional form, but an extinct species of bird, having some insignificant differences from modern birds.

The thesis that *Archaeopteryx* was a "half-bird" that could not fly perfectly was popular among evolutionist circles until not long ago. The absence of a sternum (breastbone) in this creature was held up as the most important evidence that this bird could not fly properly. (The sternum is a bone found under the thorax to which the muscles required for flight are attached. In our day, this breastbone is observed in all flying and non-flying birds, and even in bats, a flying mammal which belongs to a very different family.) However, the seventh *Archaeopteryx* fossil, which was found in 1992, disproved this argument. The reason was that in this recently discovered fossil, the breastbone that was long assumed by evolutionists to be missing was discovered to have existed after all. This fossil was described in the journal *Nature* as follows:

The recently discovered seventh specimen of the *Archaeopteryx* preserves a partial, rectangular sternum, long suspected but never previously documented. This attests to its strong flight muscles, but its capacity for long flights is questionable.<sup>124</sup>

This discovery invalidated the mainstay of the claims that *Archaeopteryx* was a half-bird that could not fly properly.

Moreover, the structure of the bird's feathers became one of the most important pieces of evidence confirming that *Archaeopteryx* was a flying bird in the true sense. The asymmetric feather structure of *Archaeopteryx* is indistinguishable from that of modern birds, and indicates that it could fly perfectly well. As the eminent paleontologist Carl O. Dunbar states, "Because of its feathers, [*Archaeopteryx* is] distinctly to be classed as a bird."<sup>125</sup> Paleontologist Robert Carroll further explains the subject:

The geometry of the flight feathers of *Archaeopteryx* is identical with that of modern flying birds, whereas nonflying birds have symmetrical feathers.

The way in which the feathers are arranged on the wing also falls within the range of modern birds... According to Van Tyne and Berger, the relative size and shape of the wing of *Archaeopteryx* are similar to that of birds that move through restricted openings in vegetation, such as gallinaceous birds, doves, woodcocks, woodpeckers, and most passerine birds... The flight feathers have been in stasis for at least 150 million years...<sup>126</sup>

Another fact that was revealed by the structure of *Archaeopteryx's* feathers was its warm-blooded metabolism. As was discussed above, reptiles and dinosaurs are cold-blooded animals whose body heat fluctuates with the temperature of their environment, rather than being homeostatically regulated. A very important function of the feathers on birds is the maintenance of a constant body temperature. The fact that *Archaeopteryx* had feathers shows that it was a real, warm-blooded bird that needed to retain its body heat, in contrast to dinosaurs.

### **The Teeth and Claws of *Archaeopteryx***

Two important points evolutionary biologists rely on when claiming *Archaeopteryx* was a transitional form, are the claws on its wings and its teeth.

It is true that *Archaeopteryx* had claws on its wings and teeth in its mouth, but these traits do not imply that the creature bore any kind of relationship to reptiles. Besides, two bird species living today, the touraco and the hoatzin, have claws which allow them to hold onto branches. These creatures are fully birds, with no reptilian characteristics. That is why it is completely groundless to assert that *Archaeopteryx* is a transitional form just because of the claws on its wings.

Neither do the teeth in *Archaeopteryx's* beak imply that it is a transitional form. Evolutionists are wrong to say that these teeth are reptilian characteristics, since teeth are not a typical feature of reptiles. Today, some reptiles have teeth while others do not. Moreover, *Archaeopteryx* is not the only bird species to possess teeth. It is true that there are no toothed birds in existence today, but when we look at the fossil record, we see that both during the time of *Archaeopteryx* and afterwards, and even until fairly recently, a distinct group of birds existed that could be categorised as "birds with teeth."

The most important point is that the tooth structure of *Archaeopteryx*

and other birds with teeth is totally different from that of their alleged ancestors, the dinosaurs. The well-known ornithologists L. D. Martin, J. D. Stewart, and K. N. Whetstone observed that *Archaeopteryx* and other similar birds have unserrated teeth with constricted bases and expanded roots. Yet the teeth of theropod dinosaurs, the alleged ancestors of these birds, had serrated teeth with straight roots.<sup>127</sup> These researchers also compared the ankle bones of *Archaeopteryx* with those of their alleged ancestors, the dinosaurs, and observed no similarity between them.<sup>128</sup>

Studies by anatomists such as S. Tarsitano, M.K. Hecht, and A.D. Walker have revealed that some of the similarities that John Ostrom and others have seen between the limbs of *Archaeopteryx* and dinosaurs were in reality misinterpretations.<sup>129</sup> For example, A.D. Walker has analyzed the ear region of *Archaeopteryx* and found that it is very similar to that of modern birds.<sup>130</sup>

Furthermore, J. Richard Hinchliffe, from the Institute of Biological Sciences of the University of Wales, studied the anatomies of birds and their alleged reptilian ancestors by using modern isotopic techniques and discovered that the three forelimb digits in dinosaurs are I-II-III, whereas bird wing digits are II-III-IV. This poses a big problem for the supporters of the *Archaeopteryx*-dinosaur link.<sup>131</sup> Hinchliffe published his studies and observations in *Science* in 1997, where he wrote:

Doubts about homology between theropods and bird digits remind us of some of the other problems in the "dinosaur-origin" hypothesis. These include the following: (i) The much smaller theropod forelimb (relative to body size) in comparison with the *Archaeopteryx* wing. Such small limbs are not convincing as proto-wings for a ground-up origin of flight in the



**Just like *Archaeopteryx*, there are claw-like nails on the wings of the bird *Opisthocomus hoazin*, which lives in our own time.**

relatively heavy dinosaurs. (ii) The rarity in theropods of the semilunate wrist bone, known in only four species (including *Deinonychus*). Most theropods have relatively large numbers of wrist elements, difficult to homologize with those of *Archaeopteryx*. (iii) The temporal paradox that most theropod dinosaurs and in particular the birdlike dromaeosaurs are all very much later in the fossil record than *Archaeopteryx*.

As Hinchliffe notes, the "temporal paradox" is one of the facts that deal the fatal blow to the evolutionist allegations about *Archaeopteryx*. In his book *Icons of Evolution*, American biologist Jonathan Wells remarks that *Archaeopteryx* has been turned into an "icon" of the theory of evolution, whereas evidence clearly shows that this creature is not the primitive ancestor of birds. According to Wells, one of the indications of this is that theropod dinosaurs—the alleged ancestors of *Archaeopteryx*—are actually younger than *Archaeopteryx*: "Two-legged reptiles that ran along the ground, and had other features one might expect in an ancestor of *Archaeopteryx*, appear later."<sup>132</sup>

All these findings indicate that *Archaeopteryx* was not a transitional link but only a bird that fell into a category that can be called "toothed birds." Linking this creature to theropod dinosaurs is completely invalid. In an article headed "The Demise of the 'Birds Are Dinosaurs' Theory," the American biologist Richard L. Deem writes the following about *Archaeopteryx* and the bird-dinosaur evolution claim:

The results of the recent studies show that the hands of the theropod dinosaurs are derived from digits I, II, and III, whereas the wings of birds, although they look alike in terms of structure, are derived from digits II, III, and IV... There are other problems with the "birds are dinosaurs" theory. The theropod forelimb is much smaller (relative to body size) than that of *Archaeopteryx*. The small "proto-wing" of the theropod is not very convincing, especially considering the rather hefty weight of these dinosaurs. The vast majority of the theropod lack the semilunate wrist bone, and have a large number of other wrist elements which have no homology to the bones of *Archaeopteryx*. In addition, in almost all theropods, nerve V1 exits the braincase out the side, along with several other nerves, whereas in birds, it exits out the front of the braincase, through its own hole. There is also the minor problem that the vast majority of the theropods appeared after the appearance of *Archaeopteryx*.<sup>133</sup>

## ***Archaeopteryx* and Other Ancient Bird Fossils**

Some recently found fossils also invalidate the evolutionist scenario regarding *Archaeopteryx* in other respects.

Lianhai Hou and Zhonghe Zhou, two paleontologists at the Chinese Institute of Vertebrate Paleontology, discovered a new bird fossil in 1995, and named it *Confuciusornis*. This fossil is almost the same age as *Archaeopteryx* (around 140 million years), but has no teeth in its mouth. In addition, its beak and feathers share the same features as today's birds. *Confuciusornis* has the same skeletal structure as modern birds, but also has claws on its wings, just like *Archaeopteryx*. Another structure peculiar to birds called the "pygostyle," which supports the tail feathers, was also found in *Confuciusornis*.<sup>134</sup> In short, this fossil—which is the same age as *Archaeopteryx*, which was previously thought to be the earliest bird and was accepted as a semi-reptile—looks very much like a modern bird. This fact has invalidated all the evolutionist theses claiming *Archaeopteryx* to be the primitive ancestor of all birds.

Another fossil unearthed in China caused even greater confusion. In November 1996, the existence of a 130-million-year-old bird named *Liaoningornis* was announced in *Science* by L. Hou, L. D. Martin, and Alan Feduccia. *Liaoningornis* had a breastbone to which the muscles for flight were attached, just as in modern birds.<sup>135</sup> This bird was indistinguishable from modern birds in other respects, too. The only difference was the teeth in its mouth. This showed that birds with teeth did not possess the primitive structure alleged by evolutionists. That *Liaoningornis* had the features of a modern bird was stated in an article in *Discover*, which said, "Whence came the birds? This fossil suggests that it was not from dinosaur stock."<sup>136</sup>

Another fossil that refuted the evolutionist claims regarding *Archaeopteryx* was *Eoalulavis*. The wing structure of *Eoalulavis*, which was said to be some 25 to 30 million years younger than *Archaeopteryx*, was also observed in modern slow-flying birds.<sup>137</sup> This proved that 120 million years ago, there were birds indistinguishable from modern birds in many respects, flying in the skies.

These facts once more indicate for certain that neither *Archaeopteryx* nor other ancient birds similar to it were transitional forms. The fossils do



*Confuciusornis*, which lived at the same time as *Archaeopteryx*, has many similarities to modern birds.

not indicate that different bird species evolved from each other. On the contrary, the fossil record proves that today's modern birds and some archaic birds such as *Archaeopteryx* actually lived together at the same time. It is true that some of these bird species, such as *Archaeopteryx* and *Confuciusornis*, have become extinct, but the fact that only some of the species that once existed have been able to survive down to the present day does not in itself support the theory of evolution.

### ***Archaeoraptor: The Dino-Bird Hoax***

Unable to find what they were looking for in *Archaeopteryx*, the advocates of the theory of evolution pinned their hopes on some other fossils in the 1990s and a series of reports of so-called "dino-bird" fossils appeared in the world media. Yet it was soon discovered that these claims were simply misinterpretations, or, even worse, forgeries.

The first dino-bird claim was the story of "feathered dinosaur fossils unearthed in China," which was put forward in 1996 with a great media fanfare. A reptilian fossil called *Sinosauropteryx* was found, but some paleontologists who examined the fossil said that it had bird feathers, unlike modern reptiles. Examinations conducted one year later, however, showed that the fossil actually had no structure similar to a bird's feather. A *Science* article titled "Plucking the Feathered Dinosaur" stated that the

structures named as "feathers" by evolutionary paleontologists definitely had nothing to do with feathers:

Exactly 1 year ago, paleontologists were abuzz about photos of a so-called "feathered dinosaur," which were passed around the halls at the annual meeting of the Society of Vertebrate Paleontology. The *Sinosauropteryx* specimen from the Yixian Formation in China made the front page of *The New York Times*, and was viewed by some as confirming the dinosaurian origins of birds. But at this year's vertebrate paleontology meeting in Chicago late last month, the verdict was a bit different: The structures are not modern feathers, say the roughly half-dozen Western paleontologists who have seen the specimens. ...Paleontologist Larry Martin of Kansas University, Lawrence, thinks the structures are frayed collagenous fibers beneath the skin—and so have nothing to do with birds.<sup>138</sup>

A yet more sensational case of dino-bird hype broke out in 1999. In its November 1999 issue, *National Geographic* published an article about a fossil specimen unearthed in China which was claimed to bear both bird and dinosaur features. *National Geographic* writer Christopher P. Sloan, the author of the article, went so far as to claim, "we can now say that birds are theropods just as confidently as we say that humans are mammals." This species, which was said to have lived 125 million years ago, was immediately given the scientific name *Archaeoraptor liaoningensis*.<sup>139</sup>

However, the fossil was a fake and was skillfully constructed from five separate specimens. A group of researchers, among whom were also three paleontologists, proved the forgery one year later with the help of X-ray computed tomography. The dino-bird was actually the product of a Chinese evolutionist. Chinese amateurs formed the dino-bird by using glue and cement from 88 bones and stones. Research suggests that *Archaeoraptor* was built from the front part of the skeleton of an ancient bird, and that its body and tail included bones from four different specimens.

The interesting thing is that *National Geographic* published a high-profile article about such a crude forgery—and, moreover, used it as the basis for claiming that "bird evolution" scenarios had been verified—without expressing any doubts or caution in the article at all. Dr. Storrs Olson, of the famous Smithsonian Institute Natural History Museum in the USA, later said that he warned *National Geographic* beforehand that this fossil was a fake, but that the magazine management totally ignored him.



***National Geographic's***  
**great hit, the perfect**  
**"dino-bird."**  
***Archaeopteryx*** soon  
 turned out to be a hoax.  
 All other "dino-bird"  
 candidates remain  
 speculative.

According to Olson, "*National Geographic* has reached an all-time low for engaging in sensationalistic, unsubstantiated, tabloid journalism."<sup>140</sup>

In a letter he wrote to Peter Raven of *National Geographic*, Olson describes the real story of the "feathered dinosaur" hype since its launch with a previous *National Geographic* article published in 1998 in a very detailed way:

Prior to the publication of the article "Dinosaurs Take Wing" in the July 1998 *National Geographic*, Lou Mazzatenta, the photographer for Sloan's article, invited me to the National Geographic Society to review his photographs of Chinese fossils and to comment on the slant being given to the story. At that time, I tried to interject the fact that strongly supported alternative viewpoints existed to what *National Geographic* intended to present, but it eventually became clear to me that *National Geographic* was not interested in anything other than the prevailing dogma that birds evolved from dinosaurs.

Sloan's article takes the prejudice to an entirely new level and consists in large part of unverifiable or undocumented information that "makes" the news rather than reporting it. His bald statement that "we can now say that birds are theropods just as confidently as we say that humans are mammals" is not even suggested as reflecting the views of a particular scientist or group of scientists, so that it figures as little more than editorial propagandizing. This melodramatic assertion had already been disproven by recent studies of embryology and comparative morphology, which, of course, are never mentioned.

More importantly, however, none of the structures illustrated in Sloan's

article that are claimed to be feathers have actually been proven to be feathers. Saying that they are is little more than wishful thinking that has been presented as fact. The statement on page 103 that "hollow, hairlike structures characterize protofeathers" is nonsense considering that protofeathers exist only as a theoretical construct, so that the internal structure of one is even more hypothetical.

The hype about feathered dinosaurs in the exhibit currently on display at the National Geographic Society is even worse, and makes the spurious claim that there is strong evidence that a wide variety of carnivorous dinosaurs had feathers. A model of the undisputed dinosaur *Deinonychus* and illustrations of baby tyrannosaurs are shown clad in feathers, all of which is simply imaginary and has no place outside of science fiction.

Sincerely,

Storrs L. Olson

Curator of Birds

National Museum of Natural History

Smithsonian Institution<sup>141</sup>

This revealing case demonstrates two important facts. First, there are people who have no qualms about resorting to forgery in an effort to find evidence for the theory of evolution. Second, some highly reputable popular science journals, which have assumed the mission of imposing the theory of evolution on people, are perfectly willing to disregard any facts that may be inconvenient or have alternative interpretations. That is, they have become little more than propaganda tools for propagating the theory of evolution. They take not a scientific, but a dogmatic, stance and knowingly compromise science to defend the theory of evolution to which they are so strongly devoted.

Another important aspect of the matter is that there is no evidence for the thesis that birds evolved from dinosaurs. Because of the lack of evidence, either fake evidence is produced, or actual evidence is misinterpreted. In truth, there is no evidence that birds have evolved from another living species. On the contrary, all discoveries show that birds emerged on the earth already in full possession of their distinctive body structures.

## LATEST EVIDENCE: OSTRICH STUDY REFUTES THE DINO-BIRD STORY

The latest blow to the "birds evolved from dinosaurs" theory came from a study made on the embryology of ostriches.

Drs. Alan Feduccia and Julie Nowicki of the University of North Carolina at Chapel Hill studied a series of live ostrich eggs and, once again, concluded that there cannot be an evolutionary link between birds and dinosaurs. EurekAlert, a scientific portal held by the American Association for the Advancement of Science (AAAS), reports the following:

Drs. Alan Feduccia and Julie Nowicki of the University of North Carolina at Chapel Hill... opened a series of live ostrich eggs at various stages of development and found what they believe is **proof that birds could not have descended from dinosaurs...**

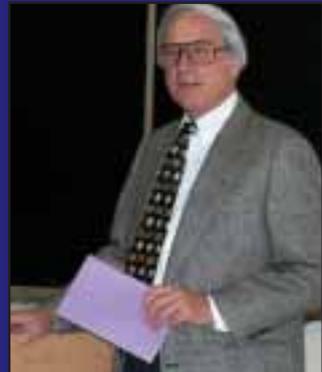
Whatever the ancestor of birds was, it must have had five fingers, not the three-fingered hand of theropod dinosaurs," Feduccia said... "Scientists agree that dinosaurs developed 'hands' with digits one, two and three... Our studies of ostrich embryos, however, showed conclusively that in birds, only digits two, three and four, which correspond to the human index, middle and ring fingers, develop, and we have pictures to prove it," said Feduccia, professor and former chair of biology at UNC. **"This creates a new problem for those who insist that dinosaurs were ancestors of modern birds.** How can a bird hand, for example, with digits two, three and four evolve from a dinosaur hand that has only digits one, two and three? **That would be almost impossible.**" <sup>1</sup>

In the same report, Dr. Feduccia also made important comments on the invalidity-and the shallowness-of the "birds evolved from dinosaurs" theory:

"There are insurmountable problems with that theory," he [Dr. Feduccia] said. "Beyond what we have just reported, there is the time problem in that superficially bird-like dinosaurs occurred some 25 million to 80 million years after the earliest known bird, which is 150 million years old."

If one views a chicken skeleton and a dinosaur skeleton through binoculars they appear similar, but **close and detailed examination reveals many differences**, Feduccia said. Theropod dinosaurs, for example, had curved, serrated teeth, but the earliest birds had straight, unserrated peg-like teeth. They also had a different method of tooth implantation and replacement."<sup>2</sup>

This evidence once again reveals that the "dino-bird" hype is just another "icon" of Darwinism: A myth that is supported only for the sake of a dogmatic faith in the theory.



Dr. Feduccia: His new study is enough to bury the 'dino-bird' myth

1 - David Williamson, "Scientist Says Ostrich Study Confirms Bird 'Hands' Unlike Those Of Dinosaurs," EurekAlert, 14-Aug-2002, [http://www.eurekalert.org/pub\\_releases/2002-08/uonc-ss081402.php](http://www.eurekalert.org/pub_releases/2002-08/uonc-ss081402.php)

2 - David Williamson, "Scientist Says Ostrich Study Confirms Bird 'Hands' Unlike Those Of Dinosaurs," EurekAlert, 14-Aug-2002, [http://www.eurekalert.org/pub\\_releases/2002-08/uonc-ss081402.php](http://www.eurekalert.org/pub_releases/2002-08/uonc-ss081402.php)

## The Origin of Insects

While discussing the origin of birds, we mentioned **the cursorial theory** that evolutionary biologists propose. As we made clear then, the question of how reptiles grew wings involves speculation about "reptiles trying to catch insects with their front legs." According to this theory, these reptiles' forefeet slowly turned into wings over time as they hunted for insects.

We have already stressed that this theory is based on no scientific discoveries whatsoever. But there is another interesting side to it, which we have not yet touched on. Flies can already fly. So how did they acquire wings? And generally speaking, what is the origin of insects, of which flies are just one class?

In the classification of living things, insects make up a subphylum, *Insecta*, of the phylum *Arthropoda*. The oldest insect fossils belong to the Devonian Age (410 to 360 million years ago). In the Pennsylvanian Age which followed (325 to 286 million years ago), there emerged a great number of different insect species. For instance, cockroaches emerge all of a sudden, and with the same structure as they have today. Betty Faber, of the American Museum of Natural History, reports that fossil cockroaches from 350 million years ago are exactly the same as those of today.<sup>142</sup>

Creatures such as spiders, ticks, and millipedes are not insects, but rather belong to other subphyla of *Arthropoda*. Important fossil discoveries of these creatures were communicated to the 1983 annual meeting of the American Association for the Advancement of Science. The interesting thing about



**There is no difference between this 320-million-year-old fossil cockroach and specimens living today.**



This *Acantherpestes major* millipede, found in the state of Kansas in the United States, is some 300 million years old, and no different from millipedes today.



145-million-year-old fossil fly. This fossil, found in Liaoning in China, is the same as flies of the same species living today.



Winged insects emerge all of a sudden in the fossil record, and from that moment they have possessed the same flawless structures as today. The 320-million-year fossil dragonfly above is the oldest known specimen and is no different from dragonflies living today. No "evolution" has taken place.

these 380-million-year-old spider, tick, and centipede fossils is the fact that they are no different from specimens alive today. One of the scientists who examined the fossils remarked that, "**they looked like they might have died yesterday.**"<sup>143</sup>

Winged insects also emerge suddenly in the fossil record, and with all the features peculiar to them. For example, a large number of dragonfly fossils from the Pennsylvanian Age have been found. And these

dragonflies have exactly the same structures as their counterparts today.

One interesting point here is the fact that dragonflies and flies emerge all of a sudden, together with wingless insects. This disproves the theory that wingless insects developed wings and gradually evolved into flying ones. In one of their articles in the book *Biomechanics in Evolution*, Robin Wootton and Charles P. Ellington have this to say on the subject:

When insect fossils first appear, in the Middle and Upper Carboniferous, they are diverse and for the most part fully winged. There are a few primitively wingless forms, but no convincing intermediates are known.<sup>144</sup>

One major characteristic of flies, which emerge all of a sudden in the fossil record, is their amazing flying technique. Whereas a human being is unable to open and close his arms even 10 times a second, an average fly **flaps its wings 500 times** in that space of time. Moreover, it moves both its wings simultaneously. The slightest dissonance in the vibration of its wings would cause the fly to lose balance, but this never happens.

In an article titled "The Mechanical Design of Fly Wings," Wootton further observes:

The better we understand the functioning of insect wings, the more subtle and beautiful their designs appear ... Structures are traditionally designed to deform as little as possible; mechanisms are designed to move component parts in predictable ways. Insect wings combine both in one, using components with a wide range of elastic properties, elegantly assembled to allow appropriate deformations in response to appropriate forces and to make the best possible use of the air. **They have few if any technological parallels – yet.**<sup>145</sup>

Of course the sudden emergence of living things with such a perfect design as this cannot be explained by any evolutionist account. That is why Pierre-Paul Grassé says, "**We are in the dark concerning the origin of insects.**"<sup>146</sup> The origin of insects clearly proves the fact of creation.

## **The Origin of Mammals**

As we have stated before, the theory of evolution proposes that some imaginary creatures that came out of the sea turned into reptiles, and that birds evolved from reptiles. According to the same scenario, reptiles are the ancestors not only of birds, but also of mammals. However, there are



A fossilized fly, trapped in amber 35 million years ago. This fossil, found on the Baltic coast, is again no different from those living in our own time.

great differences between these two classes. Mammals are warm-blooded animals (this means they can generate their own heat and maintain it at a steady level), they give live birth, they suckle their young, and their bodies are covered in fur or hair. Reptiles, on the other hand, are cold-blooded (i.e., they cannot generate heat, and their body temperature changes according to the external temperature), they lay eggs, they do not suckle their young, and their bodies are covered in scales.

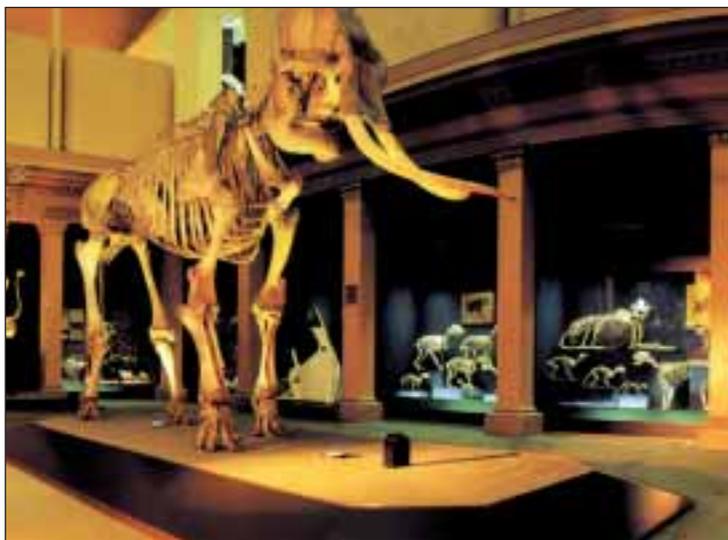
Given all these differences, then, how did a reptile start to regulate its body temperature and come by a perspiratory mechanism to allow it to maintain its body temperature? Is it possible that it replaced its scales with fur or hair and started to secrete milk? In order for the theory of evolution to explain the origin of mammals, it must first provide scientific answers to these questions.

Yet, when we look at evolutionist sources, we either find completely imaginary and unscientific scenarios, or else a profound silence. One of these scenarios is as follows:

Some of the reptiles in the colder regions began to develop a method of keeping their bodies warm. Their heat output increased when it was cold and their heat loss was cut down when scales became smaller and more pointed, and evolved into fur. Sweating was also an adaptation to regulate the body temperature, a device to cool the body when necessary by evaporation of water. But incidentally the young of these reptiles began to lick the sweat of the mother for nourishment. Certain sweat glands began to secrete a richer and richer secretion, which eventually became milk. Thus the young of these early mammals had a better start in life.<sup>147</sup>

The above quotation is nothing more than a figment of the imagination. Not only is such a fantastic scenario unsupported by the evidence, it is clearly impossible. It is quite irrational to claim that a living creature produces a highly complex nutrient such as milk by licking its mother's body sweat.

The reason why such scenarios are put forward is the fact that there are huge differences between reptiles and mammals. One example of the **structural barriers between reptiles and mammals is their jaw structure**. Mammal jaws consist of only one mandibular bone containing the teeth. In reptiles, there are three little bones on both sides of the mandible. Another basic difference is that all mammals have three bones in their



There is no difference between fossil mammals dozens of millions of years old in natural history museums and those living today. Furthermore, these fossils emerge suddenly, with no connection to species that had gone before.

middle ear (hammer, anvil, and stirrup). Reptiles have but a single bone in the middle ear. Evolutionists claim that the reptile jaw and middle ear gradually evolved into the mammal jaw and ear. The question of how an ear with a single bone evolved into one with three bones, and how the sense of hearing kept on functioning in the meantime can never be explained. Not surprisingly, not one single fossil linking reptiles and mammals has been found. This is why the renowned evolutionist science writer Roger Lewin was forced to say, "**The transition to the first mammal, ...is still an enigma.**"<sup>148</sup>

George Gaylord Simpson, one of the most important evolutionary authorities and a founder of the neo-Darwinist theory, makes the following comment regarding this perplexing difficulty for evolutionists:

The most puzzling event in the history of life on earth is **the change from the Mesozoic, the Age of Reptiles, to the Age of Mammals**. It is as if the curtain were rung down suddenly on the stage where all the leading roles were taken by reptiles, especially dinosaurs, in great numbers and bewildering variety, and rose again immediately to reveal the same setting but an entirely new cast, a cast in which the dinosaurs do not appear at all, other reptiles are supernumeraries, and all the leading parts are played by mammals of sorts barely hinted at in the preceding acts.<sup>149</sup>

Furthermore, when mammals suddenly made their appearance, they

were already very different from each other. Such dissimilar animals as bats, horses, mice, and whales are all mammals, and they all emerged during the same geological period. Establishing an evolutionary relationship among them is impossible even by the broadest stretch of the imagination. The evolutionist zoologist R. Eric Lombard makes this point in an article that appeared in the leading journal *Evolution*:

Those searching for specific information useful in constructing phylogenies of mammalian taxa will be disappointed.<sup>150</sup>

In short, the origin of mammals, like that of other groups, fails to conform to the theory of evolution in any way. George Gaylord Simpson admitted that fact many years ago:

This is true of all thirty-two orders of mammals ... The earliest and most primitive known members of every order [of mammals] 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 ... 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 classes of animals, both vertebrate and invertebrate...it is true of the classes, and of the major animal phyla, and it is apparently also true of analogous categories of plants.<sup>151</sup>

## **The Myth of Horse Evolution**

One important subject in the origin of mammals is the myth of the "evolution of the horse," also a topic to which evolutionist publications have devoted a considerable amount of space for a long time. This is a myth, because it is based on imagination rather than scientific findings.

Until recently, an imaginary sequence supposedly showing the evolution of the horse was advanced as the principal fossil evidence for the theory of evolution. Today, however, many evolutionists themselves frankly admit that the scenario of horse evolution is bankrupt. In 1980, a four-day symposium was held at the Field Museum of Natural History in Chicago, with 150 evolutionists in attendance, to discuss the problems with the gradualistic evolutionary theory. In addressing this meeting, evolutionist Boyce Rensberger noted that the scenario of the evolution of

the horse has no foundation in the fossil record, and that no evolutionary process has been observed that would account for the gradual evolution of horses:

**The popularly told example of horse evolution**, suggesting a gradual sequence of changes from four-toed fox-sized creatures living nearly 50 million years ago to today's much larger one-toed horse, **has long been known to be wrong**. Instead of gradual change, fossils of each intermediate species appear fully distinct, persist unchanged, and then become extinct. Transitional forms are unknown.<sup>152</sup>

While discussing this important dilemma in the scenario of the evolution of the horse in a particularly honest way, Rensberger brought the transitional form difficulty onto the agenda as the greatest difficulty of all.

The well-known paleontologist Colin Patterson, a director of the Natural History Museum in London, where "evolution of the horse" diagrams were on public display at that time on the ground floor of the museum, said the following about the exhibition:

**There have been an awful lot of stories, some more imaginative than others, about what the nature of that history [of life] really is.** The most famous example, still on exhibit downstairs, is the exhibit on horse evolution prepared perhaps fifty years ago. That has been presented as the literal truth in textbook after textbook. Now I think that is lamentable, particularly when the people who propose those kinds of stories may themselves be aware of the speculative nature of some of that stuff.<sup>153</sup>

Then what is the basis for the scenario of the evolution of the horse? This scenario was formulated by means of the deceitful charts devised by the sequential arrangement of fossils of distinct species that lived at vastly different periods in India, South Africa, North America, and Europe, solely in accordance with the rich power of evolutionists' imaginations. More than 20 charts of the evolution of the horse, which by the way are totally different from each other, have been proposed by various researchers. Thus, it is obvious that evolutionists have reached no common agreement on these family trees. The only common feature in these arrangements is the belief that a dog-sized creature called *Eohippus* (*Hyracotherium*), which lived in the Eocene period 55 million years ago, was the ancestor of the horse. However, the fact is that *Eohippus*, which became extinct millions of

years ago, is nearly identical to the hyrax, a small rabbit-like animal which still lives in Africa and has nothing whatsoever to do with the horse.<sup>154</sup>

The inconsistency of the theory of the evolution of the horse becomes increasingly apparent as more fossil findings are gathered. Fossils of modern horse species (*Equus nevadensis* and *Equus occidentalis*) have been discovered in the same layer as *Eohippus*.<sup>155</sup> This is an indication that the modern horse and its so-called ancestor lived at the same time.

The evolutionist science writer Gordon R. Taylor explains this little-acknowledged truth in his book *The Great Evolution Mystery*:

But perhaps the most serious weakness of Darwinism is the failure of paleontologists to find convincing phylogenies or sequences of organisms demonstrating major evolutionary change... The horse is often cited as the only fully worked-out example. But the fact is that **the line from *Eohippus* to *Equus* is very erratic**. It is alleged to show a continual increase in size, but the truth is that some variants were smaller than *Eohippus*, not larger. Specimens from different sources can be brought together in a convincing-looking sequence, but there is no evidence that they were actually ranged in this order in time.<sup>156</sup>

All these facts are strong evidence that the charts of horse evolution,



**The Evolution of the Horse exhibition in London's Natural History Museum. This and other "evolution of the horse" diagrams show independent species which lived at different times and in different places, lined up one after the other in a very subjective presentation. In reality, there are no scientific discoveries regarding the evolution of the horse.**

which are presented as one of the most solid pieces of evidence for Darwinism, are nothing but fantastic and implausible fairy tales. Like other species, horses, too, came into existence without ancestors in the evolutionary sense.

### **The Origin of Bats**

One of the most interesting creatures in the mammalian class is without doubt the flying mammal, the bat.

Topping the list of the characteristics of bats is the complex "sonar" system they possess. Thanks to this, bats can fly in the pitch dark, unable to see anything, but performing the most complicated maneuvers. They can even sense and catch a caterpillar on the floor of a dark room.

Bat sonar works in the following way. The animal emits a continuous stream of high-frequency sonic signals, analyses the echoes from these, and as a result forms a detailed image of its surroundings. What is more, it manages to do all of this at an incredible speed, continually and unerringly, while it is flying through the air.

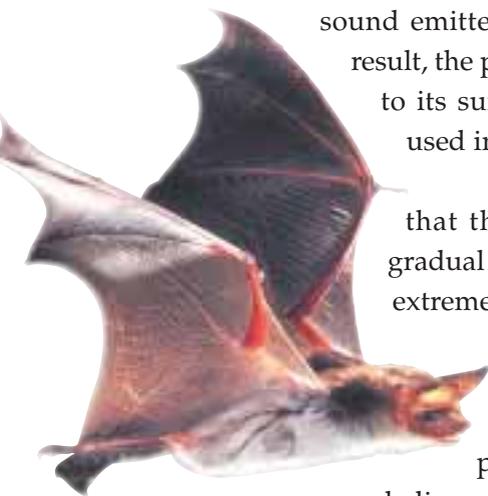
Research into the bat sonar system has produced even more surprising results. The range of frequencies the animal can perceive is very narrow; in other words it can only hear sounds of certain frequencies, which raises a very important point. Since sounds which strike a body in motion change their frequency (the well-known "Doppler effect"), as a bat sends out signals to a fly, say, that is moving away from it, the sound waves reflected from the fly should be at a different frequency that the bat is unable to perceive. For this reason, the bat should have great difficulty in sensing moving bodies.

But this is not the case. The bat continues to catch all kinds of small, fast-moving creatures with no difficulty at all. The reason is that the bat adjusts the frequency of the sound waves it sends out toward the moving bodies in its environment as if it knew all about the Doppler effect. For instance, it emits its highest-frequency signal toward a fly that is moving away from it, so that when the signal comes back, its frequency has not dropped below the threshold of the animal's hearing.

So how does this adjustment take place?

There are two groups of neurons (nerve cells) in the bat's brain which

control the sonar system. One of these perceives the echoed ultrasound, and the other gives instructions to the muscles to produce echolocation calls. These regions in the brain work in tandem, in such a way that when the frequency of the echo changes, the first region perceives this, and warns the second one, enabling it to modify the frequency of the sound emitted in accordance with that of the echo. As a result, the pitch of the bat's ultrasound changes according to its surroundings, and sonar system as a whole is used in the most efficient manner.



**Bats' sonar system is more sensitive and efficient than any technological sonar systems so far constructed.**

It is impossible to be blind to the mortal blow that the bat sonar system deals to the theory of gradual evolution through chance mutations. It is an extremely complex structure, and can in no way be accounted for by chance mutations. In order for the system to function at all, all of its components have to work together perfectly as an integrated whole. It is absurd to believe that such a highly integrated system can be explained by chance; on the contrary, it actually demonstrates that the bat is flawlessly created.

In fact, the fossil record also confirms that bats emerged suddenly and with today's complex structures. In their book *Bats: A Natural History*, the evolutionary paleontologists John E. Hill and James D. Smith reveal this fact in the form of the following admission:

The fossil record of bats extends back to the early Eocene ... and has been documented ... on five continents ... **[A]ll fossil bats, even the oldest, are clearly fully developed bats** and so they shed little light on the transition from their terrestrial ancestor.<sup>157</sup>

And the evolutionary paleontologist L. R. Godfrey has this to say on the same subject:

There are some remarkably well preserved early Tertiary fossil bats, such as *Icaronycteris index*, but *Icaronycteris* tells us nothing about the evolution of flight in bats because it was a perfectly good flying bat.<sup>158</sup>

Evolutionist scientist Jeff Hecht confesses the same problem in a 1998

The oldest known fossil bat, found in Wyoming in the United States. 50 million years old, there is no difference between this fossil and bats alive today.



*New Scientist* article:

[T]he origins of bats have been a puzzle. Even the earliest bat fossils, from about 50 million years ago, have wings that closely resemble those of modern bats.<sup>159</sup>

In short, bats' complex bodily systems cannot have emerged through evolution, and the fossil record demonstrates that no such thing happened. On the contrary, the first bats to have emerged in the world are exactly the same as those of today. Bats have always existed as bats.

## **The Origin of Marine Mammals**

Whales and dolphins belong to the order of marine mammals known as *Cetacea*. These creatures are classified as mammals because, just like land-dwelling mammals, they give live birth to their young and nurse them, they have lungs to breathe with, and they regulate their body temperature. For evolutionists, the origin of marine mammals has been one of the most difficult issues to explain. In many evolutionist sources, it is asserted that the ancestors of cetaceans left the land and evolved into marine mammals over a long period of time. Accordingly, marine mammals followed a path contrary to the transition from water to land, and underwent a second evolutionary process, returning to the water. This theory both lacks paleontological evidence and is self-contradictory. Thus, evolutionists have been silenced on this issue for a long time.

However, an evolutionist hype about the origin of marine mammals broke out in the 90's, argued to be based on some new fossil findings of the 80's like *Pakicetus* and *Ambulocetus*. These evidently quadrupedal and

terrestrial extinct mammals were alleged to be the ancestors of whales and thus many evolutionist sources did not hesitate to call them "walking whales." (In fact the full name, *Ambulocetus natans*, means "walking and swimming whale.") Popular means of evolutionist indoctrination further vulgarized the story. *National Geographic* in its November 2001 issue, finally declared the full evolutionist scenario on the "Evolution of Whales."

Nevertheless, the scenario was based on evolutionist prejudice, not scientific evidence.



**Marine mammals possess systems which are entirely peculiar to themselves. These are designed in the best way for the environment they live in.**

## The Myth of the Walking Whale

Fossil remains of the extinct mammal *Pakicetus inachus*, to give it its proper name, first came onto the agenda in 1983. P. D. Gingerich and his assistants, who found the fossil, had no hesitation in immediately claiming that it was a "primitive whale," even though they actually only found a skull.

Yet the fossil has absolutely no connection with the whale. Its skeleton turned out to be a four-footed structure, similar to that of common wolves. It was found in a region full of iron ore, and containing fossils of such terrestrial creatures as snails, tortoises, and crocodiles. In other words, it was part of a land stratum, not an aquatic one.

So, why was a quadrupedal land dweller announced to be a "primitive whale" and why is it still presented as such by evolutionist sources like *National Geographic*? The magazine gives the following reply:

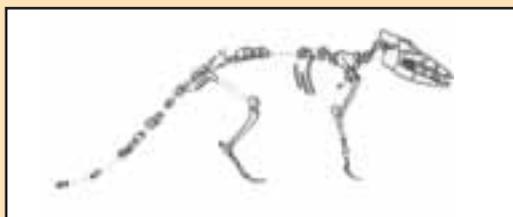
What causes scientists to declare the creature a whale? Subtle clues in combination—the arrangement of cusps on the molar teeth, a folding in a bone of the middle ear, and the positioning of the ear bones within the skull—are absent in other land mammals but a signature of later Eocene whales.<sup>160</sup>

In other words, based on some details in its teeth and ear bones,

*National Geographic* felt able to describe this quadrupedal, wolf-like land dweller as a "walking whale." These features, however, are not compelling evidence on which to base a link between *Pakicetus* and the whale:

- As *National Geographic* also indirectly stated while writing "subtle clues in combination," some of these features are actually found in terrestrial animals as well.

## Distortions in the Reconstructions of *National Geographic*



Paleontologists believe that *Pakicetus* was a quadrupedal mammal. The skeletal structure on the left, published in the *Nature* magazine clearly demonstrates this. Thus the reconstruction of *Pakicetus* (below left) by Carl Buell, which was based on that structure, is realistic.



*National Geographic*, however, opted to use a picture of a "swimming" *Pakicetus* (below) in order to portray the animal as a "walking whale" and to impose that image on its readers. The inconsistencies in the picture, intended to make *Pakicetus* seem more "whale-like," are immediately obvious: The animal has been portrayed in a "swimming" position. Its hind legs are shown stretching out backwards, and an impression of "fins" has been given.



*Pakicetus* reconstruction  
by *National Geographic*

• None of the features in question are any evidence of an evolutionary relationship. Even evolutionists admit that most of the theoretical relationships built on the basis of anatomical similarities between animals are completely untrustworthy. If the marsupial Tasmanian wolf and the common placental wolf had both been extinct for a long time, then there is no doubt that evolutionists would picture them in the same taxon and define them as very close relatives. However, we know that these two different animals, although strikingly similar in their anatomy, are very far from each other in the supposed evolutionary tree of life. (In fact their similarity indicates common design—not common descent.) *Pakicetus*, which evolutionists declare to be a "walking whale," was a unique species harboring different features in its body. In fact, Carroll, an authority on vertebrate paleontology, describes the Mesonychid family, of which *Pakicetus* should be a member, as "exhibiting an odd combination of characters."<sup>161</sup>

In his article "The Overselling of Whale Evolution," the creationist writer Ashby L. Camp reveals the total invalidity of the claim that the Mesonychid class, which should include land mammals such as *Pakicetus*, could have been the ancestors of *Archaeocetea*, or extinct whales, in these words:

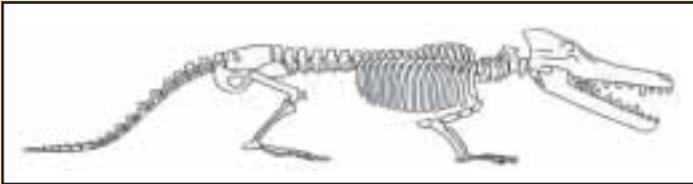
The reason evolutionists are confident that mesonychids gave rise to archaeocetes, despite the inability to identify any species in the actual lineage, is that known mesonychids and archaeocetes have some similarities. These similarities, however, are not sufficient to make the case for ancestry, especially in light of the vast differences. The subjective nature of such comparisons is evident from the fact so many groups of mammals and even reptiles have been suggested as ancestral to whales.<sup>162</sup>

The second fossil creature after *Pakicetus* in the scenario on whale origins is *Ambulocetus natans*. It is actually a land creature that evolutionists have insisted on turning into a whale.

The name *Ambulocetus natans* comes from the Latin words "ambulare" (to walk), "cetus" (whale) and "natans" (swimming), and means "a walking and swimming whale." It is obvious the animal used to walk because it had four legs, like all other mammals, and even wide claws on its feet and paws on its hind legs. Apart from evolutionists' prejudice, however, there is absolutely no basis for the claim that it swam in water, or that it lived on



**National Geographic's *Ambulocetus*:** The animal's rear legs are shown not with feet that would help it to walk, but as fins that would assist it to swim. However, Carroll, who examines the animal's leg bones, says that it possessed the ability to move powerfully on land.



**The real *Ambulocetus* :** The legs are real legs, not "fins," and there are no imaginary webs between its toes such as *National Geographic* had added. (Picture from Carroll, *Patterns and Processes of Vertebrate Evolution*, p. 335)

land and in water (like an amphibian).

After *Pakicetus* and *Ambulocetus*, the evolutionist plan moves on to so-called sea mammals and sets out (extinct whale) species such as *Procetetus*, *Rodhocetus*, and *Archaeocetea*. The animals in question were mammals that lived in the sea and which are now extinct. (We shall be touching on this matter later.) However, there are considerable anatomical differences between these and *Pakicetus* and *Ambulocetus*. When we look at the fossils, it is clear they are not "transitional forms" linking each other:

- The backbone of the quadrupedal mammal *Ambulocetus* ends at the pelvis, and powerful rear legs then extend from it. This is typical land-mammal anatomy. In whales, however, the backbone goes right down to the tail, and there is no pelvic bone at all. In fact, *Basilosaurus*, believed to have lived some 10 million years after *Ambulocetus*, possesses the latter

anatomy. In other words, it is a typical whale. There is no transitional form between *Ambulocetus*, a typical land mammal, and *Basilosaurus*, a typical whale.

- Under the backbone of *Basilosaurus* and the sperm whale, there are small bones independent of it. *National Geographic* claims these to be vestigial legs. Yet that same magazine mentions that these bones actually had another function. In *Basilosaurus*, these bones functioned as copulatory guides and in sperm whales "[act] as an anchor for the muscles of the genitalia."<sup>163</sup> To describe these bones, which actually carry out important functions, as "vestigial organs" is nothing but Darwinistic prejudice.

In conclusion, despite evolutionist propaganda, the fact that there were no transitional forms between land and sea mammals and that they both emerged with their own particular features has not changed. There is no evolutionary link. Robert Carroll accepts this, albeit unwillingly and in evolutionist language: "It is not possible to identify a sequence of mesonychids leading directly to whales."<sup>164</sup>

Although he is an evolutionist, the famous Russian whale expert G. A. Mchedlidze, too, does not support the description of *Pakicetus*, *Ambulocetus natans*, and similar four-legged creatures as "possible ancestors of the whale," and describes them instead as a completely isolated group.<sup>165</sup>

## Problems With Superficial Sequences

Alongside the facts we have discussed above, the dates ascribed by *National Geographic* to the species in question have been selected in line with Darwinist prejudices. The animals are shown as following each other in a geological line, whereas these are questionable. Ashby L. Camp clarifies the situation, based on paleontological data:

In the standard scheme, *Pakicetus inachus* is dated to the late Ypresian, but several experts acknowledge that it may date to the early Lutetian. If the younger date (early Lutetian) is accepted, then *Pakicetus* is nearly, if not actually, contemporaneous with *Rodhocetus*, an early Lutetian fossil from another formation in Pakistan. Moreover, the date of *Ambulocetus*, which was found in the same formation as *Pakicetus* but 120 meters higher, would have to be adjusted upward the same amount as *Pakicetus*. This would make

*Ambulocetus* younger than *Rodhocetus* and possibly younger than *Indocetus* and even *Protocetus*.<sup>166</sup>

In brief, there are two different views of when the animals that *National Geographic* chronologically sets out one after the other really lived. If the second view is accepted, then *Pakicetus* and *Ambulocetus*, which *National Geographic* portrays as "the walking whale," are of the same age as, or even younger than, true whales. In other words, no "evolutionary line" is possible.

### **The Surprisingly Lamarckian Superstitions of Evolutionists**

Another very important issue on the origin of marine mammals is the great anatomical and physiological differences between them and their alleged terrestrial ancestors. Evolutionists assume that step-by-step processes were at work for all the necessary transitions, but this is an absurd idea since many of the systems in discussion are irreducibly complex structures that could not form by successive stages.

Let us consider just one case: the ear structure. Like us, land mammals trap sounds from the outside world in the outer ear, amplify them with the bones in the middle ear, and turn them into signals in the inner ear. Marine mammals have no outer ear. They hear sounds by means of vibration-sensitive receptors in their lower jaws. The crucial point is that any evolution by stages between one perfect aural system to a completely different one is impossible. The transitional phases would not be advantageous. An animal that slowly loses its ability to hear with its ears, but has still not developed the ability to hear through its jaw, is at a disadvantage.

The question of how such a "development" could come about is an insoluble dilemma for evolutionists. The mechanisms evolutionists put forward are mutations and these have never been seen to add unequivocally new and meaningful information to animals' genetic information. It is unreasonable to suggest that the complex hearing system in sea mammals could have emerged as the result of mutations.

But evolutionists do believe in this unreasonable scenario and this problem stems from a kind of superstition about the origin of living

things. This superstition is the magical "natural force" that allows living things to acquire the organs, biological changes, or anatomical features that they need. Let us have a look at a few interesting passages from *National Geographic's* article "Evolution of Whales":

...I tried to visualize some of the varieties of whale ancestors that had been found here and nearby... As the rear limbs dwindled, so did the hip bones that supported them. That made the spinal column more flexible to power the developing tail flukes. The neck shortened, turning the leading end of the body into more of a tubular hull to plow through the water with minimum drag, while arms assumed the shape of rudders. Having little need for outer ears any longer, some whales were receiving waterborne sounds directly through their lower jawbones and transmitting them to the inner ears via special fat pads. Each whale in the sequence was a little more streamlined than earlier models and roamed farther from shore.<sup>167</sup>

On close inspection, in this whole account the evolutionist mentality says that living things feel changing needs according to the changing environment they live in, and this need is perceived as an "evolutionary mechanism." According to this logic, less needed organs disappear, and needed organs appear of their own accord!

Anyone with the slightest knowledge of biology will know that our needs do not shape our organs. Ever since Lamarck's theory of the transfer of acquired characteristics to subsequent generations was disproved, in other words for a century or so, that has been a known fact. Yet when one looks at evolutionist publications, they still seem to be thinking along Lamarckian lines. If you object, they will say: "No, we do not believe in Lamarck. What we say is that natural conditions put evolutionary pressure on living things, and that as a result of this, appropriate traits are selected, and in this way species evolve." Yet here lies the critical point: What evolutionists call "evolutionary pressure" cannot lead to living things acquiring new characteristics according to their needs. That is because the two so-called evolutionary mechanisms that supposedly respond to this pressure, natural selection and mutation, cannot provide new organs for animals:

- Natural selection can only select characteristics that already exist, it cannot create new ones.
- Mutations cannot add to the genetic information, they can only

destroy the existing one. No mutation that adds unequivocally new, meaningful information to the genome (and which thus forms a new organ or new biochemical structure) has ever been observed.

If we look at the myth of *National Geographic's* awkwardly moving whales one more time in the light of this fact, we see that they are actually engaging in a rather primitive Lamarckism. On close inspection, *National Geographic* writer Douglas H. Chadwick "visualizes" that "Each whale in the sequence was a little more streamlined than earlier models." How could a morphological change happen in a species over generations in one particular direction? In order for that to happen, representatives of that species in every "sequence" would have to undergo mutations to shorten their legs, that mutation would have to cause the animals no harm, those thus mutants would have to enjoy an advantage over normal ones, the next generations, by a great coincidence, would have to undergo the same mutation at the same point in its genes, this would have to carry on unchanged for many generations, and all of the above would have to happen by chance and quite flawlessly.

If the *National Geographic* writers believe that, then they will also believe someone who says: "My family enjoys flying. My son underwent a mutation and a few structures like bird feathers developed under his arms. My grandson will undergo the same mutation and the feathers will increase. This will go on for generations, and eventually my descendants will have wings and be able to fly." Both stories are equally ridiculous.

As we mentioned at the beginning, evolutionists display the superstition that living things' needs can be met by a magical force in nature. Ascribing consciousness to nature, a belief encountered in animist cultures, is interestingly rising up before our eyes in the 21st century under a "scientific" cloak. Henry Gee, the editor of *Nature* and an undisputedly prominent evolutionist, points to the same fact and admits that explaining the origin of an organ by its necessity is like saying;

... our noses were made to carry spectacles, so we have spectacles. Yet evolutionary biologists do much the same thing when they interpret any structure in terms of adaptation to current utility while failing to acknowledge that current utility needs tell us nothing about how a structure evolved, or indeed how the evolutionary history of a structure might itself have influenced the shape and properties of that structure.<sup>168</sup>

## **The Unique Structures of Marine Mammals**

To see the impossibility of the evolutionist scenario on the marine mammals, let us briefly examine some other unique features of these animals. When the adaptations a land-dwelling mammal has to undergo in order to evolve into a marine mammal are considered, even the word "impossible" seems inadequate. During such a transition, if even of one of the intermediary stages failed to happen, the creature would be unable to survive, which would put an end to the entire process. The adaptations that marine mammals must undergo during the transition to water are as follows:

**1- Water-retention:** Unlike other marine animals, marine mammals cannot use sea water to meet their water needs. They need fresh water to survive. Though we have limited information about the freshwater resources of marine mammals, it is believed that they feed on organisms containing a relatively low proportion of salt (about one third that of sea water). Thus, for marine mammals the retention of water in their bodies is crucial. That is why they have a water retention mechanism similar to that of camels. Like camels, marine mammals do not sweat; however, their kidneys are perfectly functional, producing highly concentrated urine that enables the animal to save water. In this way, water loss is reduced to a minimum.

Design for water retention can be seen even in minor details. For instance, the mother whale feeds her baby with a concentrated form of milk similar to cheese. This milk contains ten times more fat than human milk. There are a number of chemical reasons why this milk is so rich in fat. Water is released as the young whale digests the milk. In this way, the mother meets the young whale's water needs with minimum water loss.

**2- Sight and communication:** The eyes of dolphins and whales enable them to have acute eyesight in different environments. They have perfect eyesight in water as well as out. Yet most living things, including man, have poor eyesight out of their natural environments.

The eyes of marine and land-dwelling mammals are astonishingly elaborate. On land, the eyes face a number of potential dangers. That is why the eyes of land-dwelling animals have lids to protect them. In the ocean, the greatest threats to the eye come from the high level of salt and the pressure from currents. To avoid direct contact with the currents, the

eyes are located on the sides of the head. In addition to this, a hard layer protects the eyes of creatures which dive to great depths. The eyes of marine mammals are equipped with elaborate features enabling them to see at depths where there is little light. For example, their lenses are perfectly circular in shape, while in their retinas, rods (the cells sensitive to light) outnumber cones (the cells sensitive to colours and details). Furthermore, the eyes of cetaceans also contain a phosphorus layer, which also helps them see particularly well in the dark.

Even so, however, sight is not most important sensory modality of marine mammals. They rely more on their sense of hearing than is typically the case with land-dwelling mammals. Light is essential for sight, whereas hearing requires no such assistance. Many whales and dolphins hunt at a depth where it is completely dark, by means of a sonar mechanism they possess. Toothed whales, in particular, "see" by means of sound waves. Just as happens with light waves in the visual system, sound waves are focused and then analyzed and interpreted in the brain. This gives the cetacean accurate information regarding the shape, size, speed and position of the object in front of it. This sonic system is extremely sensitive—for instance, a dolphin can sense a person jumping into the sea. Sound waves are also used for determining direction and for communication. For example, two whales hundreds of kilometers apart can communicate via sound.

The question of how these animals produce the sounds that enable them to determine direction or to communicate is still largely unresolved. As far as we know, one particular feature in the dolphin's body deserves particular attention: namely, the animal's skull is insulated against sound, a feature that protects the brain from continuous and intensive noise bombardment.

Let us now consider the question: Is it possible that all these astonishing features in marine mammals came into existence by means of natural selection and mutation? What mutation could result in the dolphin's body's coming to possess a sonar system and a brain insulated from sound? What kind of mutation could enable its eye to see in dark water? What mutation could lead to the mechanism that allows the most economic use of water?

There is no end to such questions, and evolution has no answer to any of them. Instead, the theory of evolution makes do with an unbelievable story. Consider all the coincidences that this story involves in the case of marine mammals. First of all, fish just happened to come into existence in the water. Next, they made the transition to land by pure chance. Following this, they evolved on the land into reptiles and mammals, also by chance alone. Finally, it just so happened that some of these creatures returned to the water where by chance they acquired all the features they would need to survive there.

Can the theory of evolution prove even a single one of these stages? Certainly not. Far from being able to prove the claim as a whole, the theory of evolution is unable to demonstrate how even one of these different steps could have happened.

### **The Marine Mammal Scenario Itself**

We have so far examined the evolutionist scenario that marine mammals evolved from terrestrial ones. Scientific evidence shows no relationship between the two terrestrial mammals (*Pakicetus* and *Ambulocetus*) that evolutionists put at the beginning of the story. So what about the rest of the scenario? The theory of evolution is again in a great difficulty here. The theory tries to establish a phylogenetic link between *Archaeocetea* (archaic whales), sea mammals known to be extinct, and living whales and dolphins. However, evolutionary paleontologist Barbara J. Stahl admits that; "the serpentine form of the body and the peculiar serrated cheek teeth make it plain that these archaeocetes could not possibly have been ancestral to any of the modern whales."<sup>169</sup>

The evolutionist account of the origin of marine mammals faces a huge impasse in the form of discoveries in the field of molecular biology. The classical evolutionist scenario assumes that the two major whale groups, the toothed whales (*Odontoceti*) and the baleen whales (*Mysticeti*), evolved from a common ancestor. Yet Michel Milinkovitch of the University of Brussels has opposed this view with a new theory. He stresses that this assumption, based on anatomical similarities, is disproved by molecular discoveries:

Evolutionary relationships among the major groups of cetaceans is more

problematic since morphological and molecular analyses reach very different conclusions. Indeed, based on the conventional interpretation of the morphological and behavioral data set, the echolocating toothed whales (about 67 species) and the filter-feeding baleen whales (10 species) are considered as two distinct monophyletic groups... On the other hand, phylogenetic analysis of DNA... and amino acid... sequences contradict this long-accepted taxonomic division. One group of toothed whales, the sperm whales, appear to be more closely related to the morphologically highly divergent baleen whales than to other odontocetes.<sup>170</sup>

In short, marine mammals defy the evolutionary scenarios which they are being forced to fit.

Contrary to the claims of the paleontologist Hans Thewissen, who assumes a major role in evolutionist propaganda on the origin of marine mammals, we are dealing not with an evolutionary process backed up by empirical evidence, but by evidence coerced to fit a presupposed evolutionary family tree, despite the many contradictions between the two.

What emerges, if the evidence is looked at more objectively, is that different living groups emerged independently of each other in the past. This is compelling empirical evidence for accepting that all of these creatures were created.

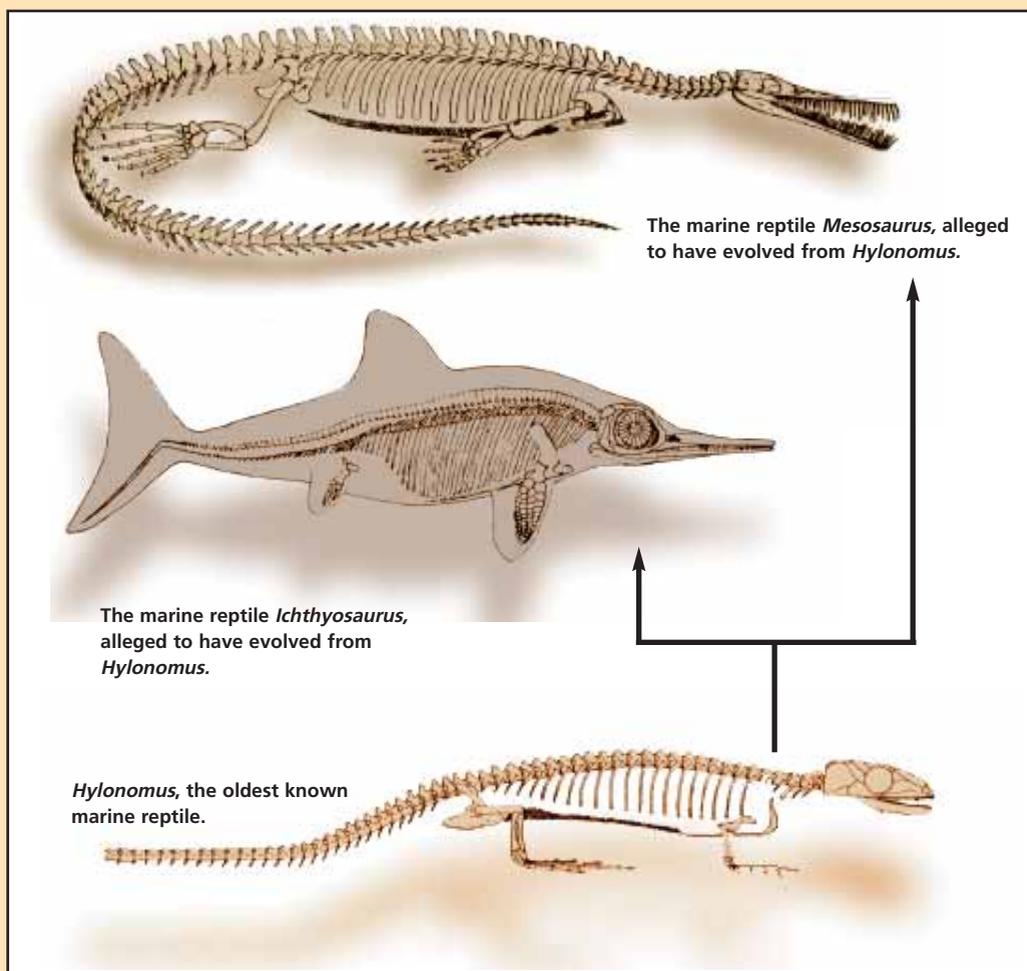
## **Conclusion**

All the findings we have examined so far reveal that species appeared on earth suddenly and fully formed, with no evolutionary process prior to them. If this is so, then this is concrete evidence that living things are created, as evolutionary biologist Douglas Futuyma has acknowledged. Recall that he wrote: "If they did appear in a fully developed state, they must indeed have been created by some omnipotent intelligence."<sup>171</sup> Evolutionists, on the other hand, try to interpret the sequence by which living things appeared on earth as evidence for evolution. However, since no such evolutionary process ever took place, this sequence can only be the sequence of creation. Fossils reveal that living things appeared on earth first in the sea, and then on land, followed by the appearance of man, who possesses a flawless and superior design.

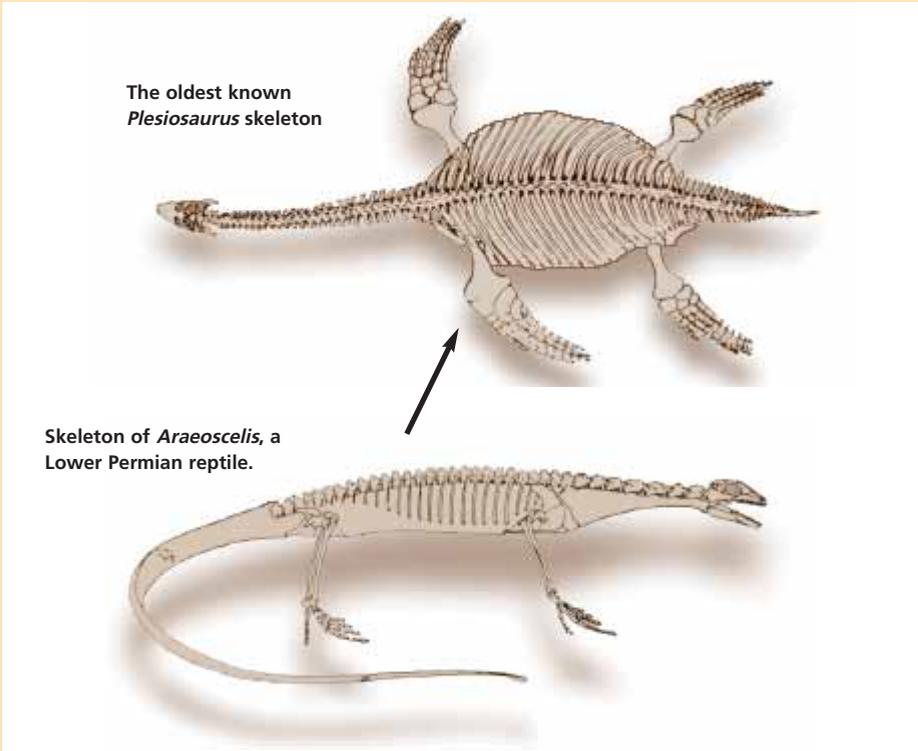
## THE GREAT MORPHOLOGICAL DIFFERENCES BETWEEN ANIMALS WHICH ARE CLAIMED TO HAVE DESCENDED FROM ONE ANOTHER

So far, we have seen that different species emerged on earth with no evolutionary "intermediate forms" between them. They appear in the fossil record with such great differences that it is impossible to establish any evolutionary connection between them.

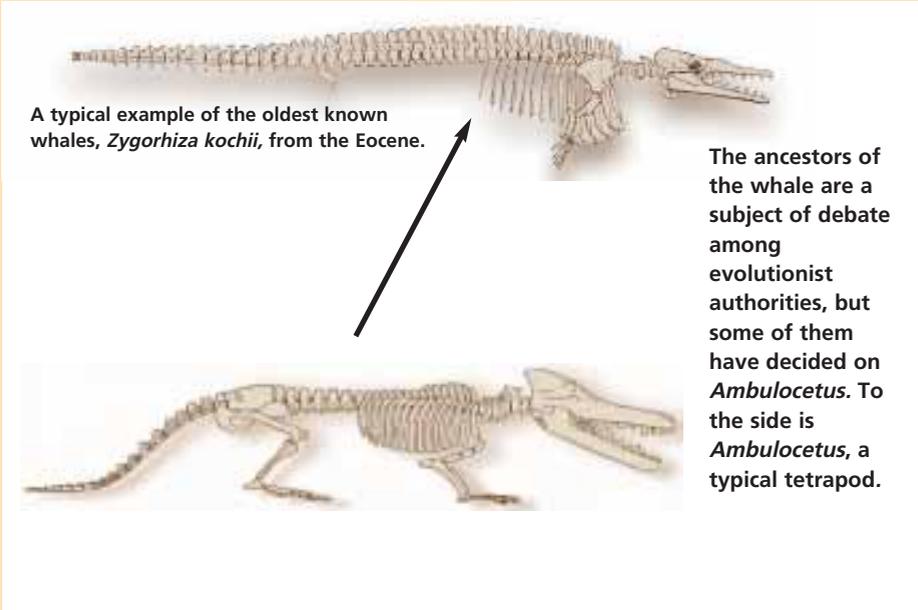
When we compare their skeletal structures, this fact can once again clearly be seen. Animals which are alleged to be evolutionary relatives differ enormously. We shall now examine some examples of these. All the drawings have been taken from evolutionist sources by experts on vertebrates. (As also contrasted by Michael Denton in his *Evolution: A Theory in Crisis*, 1986)



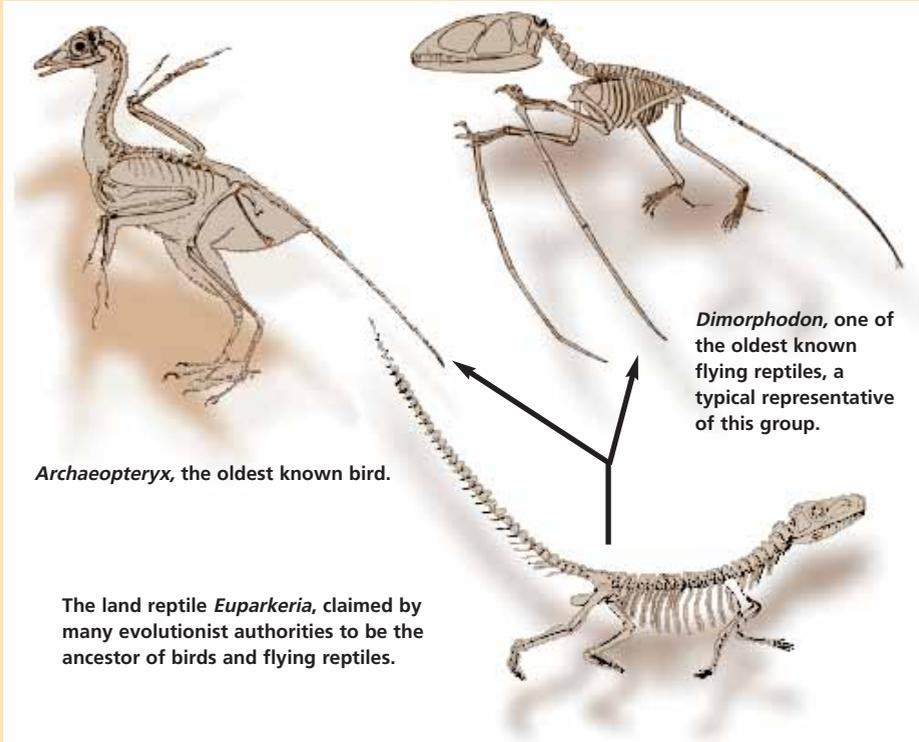
Two different species of marine reptiles, and the land animal that evolutionists claim is their nearest ancestor. Take note of the great differences between them.



*Plesiosaurus*, the oldest known marine reptile, and its nearest terrestrial relative according to evolutionists. There is no resemblance between the two.



An early whale and what evolutionists claim to be its closest ancestor. Note that there is no resemblance between them. Even the best candidate that evolutionists have found for being the ancestor of whales has nothing to do with them.

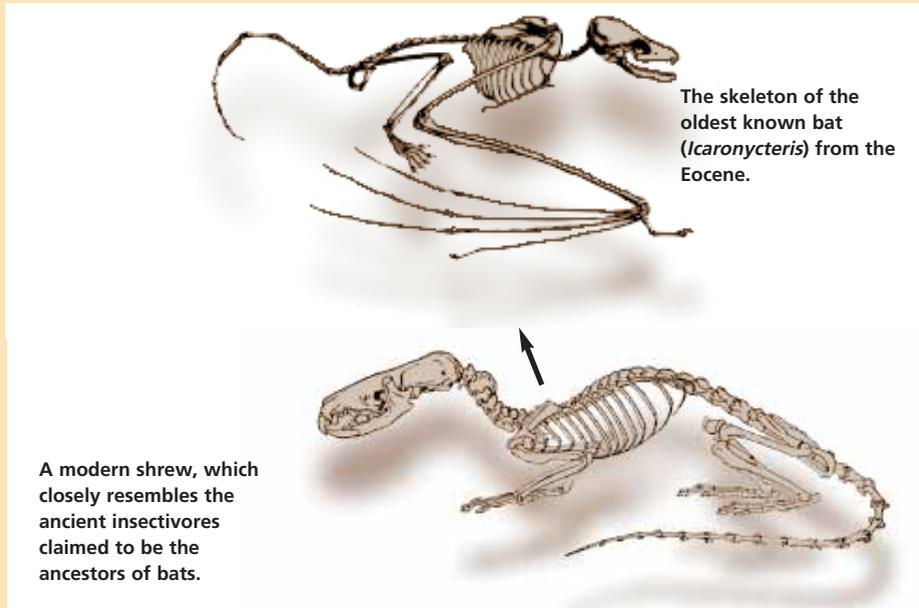


*Archaeopteryx*, the oldest known bird.

*Dimorphodon*, one of the oldest known flying reptiles, a typical representative of this group.

The land reptile *Euparkeria*, claimed by many evolutionist authorities to be the ancestor of birds and flying reptiles.

The oldest known bird (*Archaeopteryx*), a flying reptile, and a land reptile that evolutionists claim to have been these creatures' closest ancestor. The differences between them are very great.

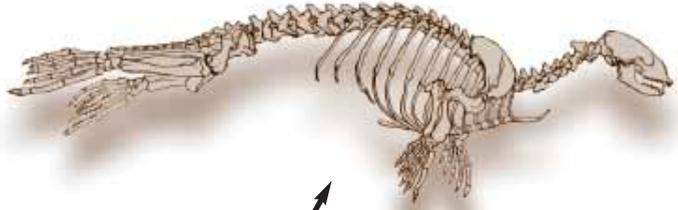


The skeleton of the oldest known bat (*Icaronycteris*) from the Eocene.

A modern shrew, which closely resembles the ancient insectivores claimed to be the ancestors of bats.

The oldest known bat, and what evolutionists claim is its closest ancestor. Note the great difference between the bat and its so-called ancestor.

Skeleton of modern seal, virtually identical to the earliest known seals of the Miocene era.

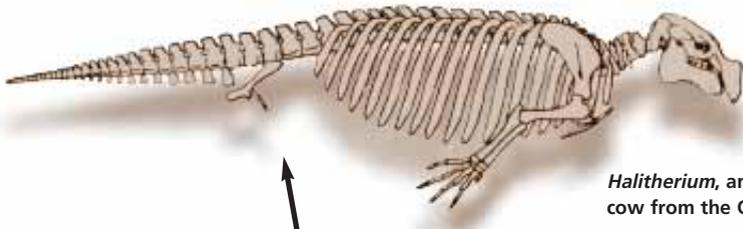


*Cynodictis gregarius*, the land-dwelling carnivorous mammal which evolutionists believe to have been seals' closest ancestor.

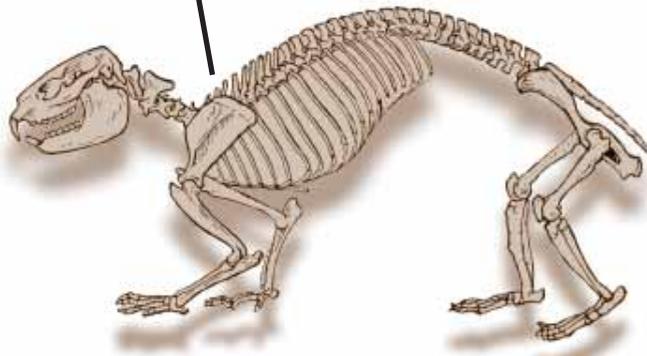


A typical seal skeleton, and what evolutionists believe to be its nearest land-dwelling ancestor. Again, there is a huge difference between the two.

Hyrax, which is considered to be the nearest terrestrial ancestor of the sirenian aquatic mammals which also include sea cows.



*Halitherium*, an early sea cow from the Oligocene



A sea cow, and what evolutionists call its nearest terrestrial ancestor.

# THE INVALIDITY OF PUNCTUATED EQUILIBRIUM

In an earlier chapter, we examined how the fossil record clearly invalidates the hypotheses of the Darwinist theory. We saw that the different living groups in the fossil record emerged suddenly, and stayed fixed for millions of years without undergoing any changes.

This great discovery of paleontology shows that living species exist with no evolutionary processes behind them.

This fact was ignored for many years by paleontologists, who kept hoping that imaginary "intermediate forms" would one day be found. In the 1970s, some paleontologists accepted that this was an unfounded hope and that the "gaps" in the fossil record had to be accepted as a reality. However, because these paleontologists were unable to relinquish the theory of evolution, they tried to explain this reality by modifying the theory. And so was born the "**punctuated equilibrium**" model of evolution, which differs from neo-Darwinism in a number of respects.

This model began to be vigorously promoted at the start of the 1970s by the paleontologists Stephen Jay Gould of Harvard University and Niles Eldredge of the American Museum of Natural History. They summarized the evidence presented by the fossil record as revealing two basic characteristics:

1. **Stasis**
2. **Sudden appearance** <sup>172</sup>

In order to explain these two facts within the theory of evolution, Gould and Eldredge proposed that living species came about not through a series of small changes, as Darwin had maintained, but by sudden, large ones.

This theory was actually a modified form of the "**Hopeful Monster**" theory put forward by the German paleontologist Otto Schindewolf in the 1930s. Schindewolf suggested that living things evolved not, as neo-Darwinism had proposed, gradually over time through small mutations, but suddenly through giant ones. When giving examples of his theory, Schindewolf claimed that the first bird in history had emerged from a reptile egg by a huge mutation—in other words, through a giant, coincidental change in genetic structure.<sup>173</sup> According to this theory, some land animals might have suddenly turned into giant whales through a comprehensive change that they underwent. This fantastic theory of Schindewolf's was taken up and defended by the Berkeley University geneticist Richard Goldschmidt. But the theory was so inconsistent that it was quickly abandoned.

The factor that obliged Gould and Eldredge to embrace this theory again was, as we have already established, that the fossil record is at odds with the Darwinistic notion of step by step evolution through minor changes. The fact of stasis and sudden emergence in the record was so empirically well supported that they had to resort to a more refined version of the "hopeful monster" theory again to explain the situation. Gould's famous article "Return of the Hopeful Monster" was a statement of this obligatory step back.<sup>174</sup>

Gould and Eldredge did not just repeat Schindewolf's fantastic theory, of course. In order to give the theory a "scientific" appearance, they tried to develop some kind of mechanism for these sudden evolutionary leaps. (The interesting term, "punctuated equilibrium," they chose for this theory is a sign of this struggle to give it a scientific veneer.) In the years that followed, Gould and Eldredge's theory was taken up and expanded by some other paleontologists. However, the punctuated equilibrium theory of evolution was based on even more contradictions and inconsistencies than the neo-Darwinist theory of evolution.

## **The Mechanism of Punctuated Equilibrium**

The punctuated equilibrium theory of evolution, in its present state, holds that living populations show no changes over long periods of time, but stay in a kind of equilibrium. According to this viewpoint, evolutionary changes take place in short time frames and in very restricted populations—that is, the equilibrium is divided into separate periods or, in other words, "punctuated." Because the population is very small, large mutations are chosen by natural selection and thus enable a new species to emerge.

For instance, according to this theory, a species of reptile survives for millions of years, undergoing no changes. But one small group of reptiles somehow leaves this species and undergoes a series of major mutations, the reason for which is not made clear. Those mutations which are advantageous quickly take root in this restricted group. The group evolves rapidly, and in a short time turns into another species of reptile, or even a mammal. Because this process happens very quickly, and in a small population, there are very few fossils of intermediate forms left behind, or maybe none.

On close examination, this theory was actually proposed to develop an answer to the question, "**How can one imagine an evolutionary period so rapid as not to leave any fossils behind it?**" Two basic hypotheses are accepted while developing this answer:

1. that macromutations—wide-ranging mutations leading to large changes in living creatures' genetic make-up—bring advantages and produce new genetic information; and
2. that small animal populations have greater potential for genetic change.

However, both of these hypotheses are clearly at odds with scientific knowledge.

## **The Misconception About Macromutations**

The first hypothesis—that macromutations occur in large numbers, making the emergence of new species possible—conflicts with known facts of genetics.

One rule, put forward by R. A. Fisher, one of the last century's best

known geneticists, and based on observations, clearly invalidates this hypothesis. Fisher states in his book *The Genetical Theory of Natural Selection* that the likelihood that a particular mutation will become fixed in a population is inversely proportional to its effect on the phenotype.<sup>175</sup> Or, to put it another way, the bigger the mutation, the less chance it has of becoming a permanent trait within the group.

It is not hard to see the reason for this. Mutations, as we have seen in earlier chapters, consist of chance changes in genetic codes, and never have a beneficial influence on organisms' genetic data. Quite the contrary: individuals affected by mutation undergo serious illnesses and deformities. For this reason, the more an individual is affected by mutation, the less chance it has of surviving.

Ernst Mayr, the doyen of Darwinism, makes this comment on the subject:

The occurrence of genetic monstrosities by mutation ... is well substantiated, but they are such evident freaks that these monsters can be designated only as 'hopeless'. They are so utterly unbalanced that they would not have the slightest chance of escaping elimination through stabilizing selection ... the more drastically a mutation affects the phenotype, the more likely it is to reduce fitness. To believe that such a drastic mutation would produce a viable new type, capable of occupying a new adaptive zone, is equivalent to believing in miracles ... The finding of a suitable mate for the 'hopeless monster' and the establishment of reproductive isolation from the normal members of the parental population seem to me insurmountable difficulties.<sup>176</sup>

It is obvious that mutations cannot bring about evolutionary development, and this fact places both neo-Darwinism and the punctuated equilibrium theory of evolution in a terrible difficulty. Since mutation is a destructive mechanism, the macromutations that proponents of the punctuated equilibrium theory talk about must have "macro" destructive effects. Some evolutionists place their hopes in mutations in the **regulatory genes** in DNA. But the feature of destructiveness which applies to other mutations, applies to these, as well. The problem is that mutation is a random change: any kind of random change in a structure as complex as genetic data will lead to harmful results.

In their book *The Natural Limits to Biological Change*, the geneticist



**Two famous proponents of the punctuated evolution model: Stephen Jay Gould and Niles Eldredge.**

Lane Lester and the population biologist Raymond Bohlin describe the blind alley represented by the notion of macromutation:

The overall factor that has come up again and again is that mutation remains the ultimate source of all genetic variation in any evolutionary model. Being unsatisfied with the prospects of accumulating small point mutations, many are turning to macromutations to explain the origin of evolutionary novelties. Goldschmidt's hopeful monsters have indeed returned. However, **though macromutations of many varieties produce drastic changes, the vast majority will be incapable of survival, let alone show the marks of increasing complexity.** If structural gene mutations are inadequate because of their inability to produce significant enough changes, then regulatory and developmental mutations appear even less useful because of the greater likelihood of nonadaptive or even destructive consequences... But one thing seems certain: at present, **the thesis that mutations, whether great or small, are capable of producing limitless biological change is more an article of faith than fact.**<sup>177</sup>

Observation and experiment both show that mutations do not enhance genetic data, but rather damage living things. Therefore, it is clearly irrational for proponents of the punctuated equilibrium theory to expect greater success from "mutations" than the mainstream neo-Darwinists have found.

## The Misconception About Restricted Populations

The second concept stressed by the proponents of punctuated equilibrium theory is that of "restricted populations." By this, they mean that the emergence of new species comes about in communities containing very small numbers of plants or animals. According to this claim, large populations of animals show no evolutionary development and maintain their "stasis." But small groups sometimes become separated from these communities, and these "isolated" groups mate only amongst themselves. (It is hypothesized that this usually stems from geographical conditions.) Macromutations are supposed to be most effective within such small, inbreeding groups, and that is how rapid "speciation" can take place.

But why do proponents of the punctuated equilibrium theory insist so much on the concept of restricted populations? The reason is clear: Their aim is provide an explanation for the absence of intermediate forms in the fossil record.

However, scientific experiments and observations carried out in recent years have revealed that being in a **restricted population is not an advantage from the genetic point of view, but rather a disadvantage**. Far from developing in such a way as to give rise to new species, small populations give rise to serious genetic defects. The reason for this is that in restricted populations individuals must continually mate within a narrow genetic pool. For this reason, normally heterozygous individuals become increasingly homozygous. This means that defective genes which are normally recessive become dominant, with the result that genetic defects and sickness increase within the population.<sup>178</sup>

In order to examine this matter, a 35-year study of a small, inbred population of chickens was carried out. It was found that the individual chickens became progressively weaker from the genetic point of view over time. Their egg production fell from 100 to 80 percent of individuals, and their fertility declined from 93 to 74 percent. But when chickens from other regions were added to the population, this trend toward genetic weakening was halted and even reversed. With the infusion of new genes from outside the restricted group, eventually the indicators of the health of the population returned to normal.<sup>179</sup>

This and similar discoveries have clearly revealed that the claim by the proponents of punctuated equilibrium theory that small populations are the source of evolution has no scientific validity.

## **Conclusion**

Scientific discoveries do not support the claims of the punctuated equilibrium theory of evolution. The claim that organisms in small populations can swiftly evolve with macromutations is actually even less valid than the model of evolution proposed by the mainstream neo-Darwinists.

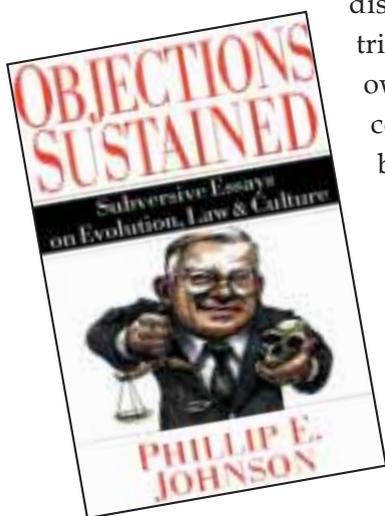
So, why has this theory become so popular in recent years? This question can be answered by looking at the debates within the Darwinist community. Almost all the proponents of the punctuated equilibrium theory of evolution are paleontologists. This group, led by such famous paleontologists as Steven Jay Gould, Niles Eldredge, and Steven M. Stanley, clearly see that the fossil record disproves the Darwinist theory. However, they have conditioned themselves to believe in evolution, no matter what. So for this reason they have resorted to the punctuated equilibrium theory as the only way of accounting even in part for the facts of the fossil record.

On the other hand, geneticists, zoologists, and anatomists see that there is no mechanism in nature which can give rise to any "punctuations," and for this reason they insist on defending the gradualistic Darwinist model of evolution. The Oxford University zoologist Richard Dawkins fiercely criticizes the proponents of the punctuated equilibrium model of evolution, and accuses them of "destroying the theory of evolution's credibility."

The result of this dialogue of the deaf is the scientific crisis the theory of evolution now faces. We are dealing with an evolution myth which agrees with no experiments or observations, and no paleontological



**Richard Dawkins, busy indoctrinating the young through Darwinist propaganda.**



discoveries. Every evolutionist theoretician tries to find support for the theory from his own field of expertise, but then enters into conflict with discoveries from other branches of science. Some people try to gloss over this confusion with superficial comments such as "science progresses by means of academic disputes of this kind." However, the problem is not that the mental gymnastics in these debates are being carried out in order to discover a correct scientific theory; rather, the problem is that speculations are being advanced dogmatically and irrationally in

order to stubbornly defend a theory that is demonstrably false.

However, the theoreticians of punctuated equilibrium have made one important, albeit unwitting, contribution to science: They have clearly shown that the fossil record conflicts with the concept of evolution. Phillip Johnson, one of the world's foremost critics of the theory of evolution, has described Stephen Jay Gould, one of the most important punctuated equilibrium theoreticians, as "**the Gorbachev of Darwinism.**"<sup>180</sup> Gorbachev thought that there were defects in the Communist state system of the Soviet Union and tried to "reform" that system. However, the problems which he thought were defects were in fact fundamental to the nature of the system itself. That is why Communism melted away in his hands.

The same fate will soon await Darwinism and the other models of evolution.



# THE ORIGIN OF MAN

Darwin put forward his claim that human beings and apes descended from a common ancestor in his book *The Descent of Man*, published in 1871. From that time until now, the followers of Darwin's path have tried to support this claim. But despite all the research that has been carried out, the claim of "human evolution" has not been backed up by any concrete scientific discovery, particularly in the fossil field.

The man in the street is for the most part unaware of this fact, and thinks that the claim of human evolution is supported by a great deal of firm evidence. The reason for this incorrect opinion is that the subject is frequently discussed in the media and presented as a proven fact. But real experts on the subject are aware that there is no scientific foundation for the claim of human evolution. David Pilbeam, a Harvard University paleoanthropologist, says:

If you brought in a smart scientist from another discipline and showed him the meagre evidence we've got he'd surely say, "forget it; there isn't enough to go on."<sup>181</sup>

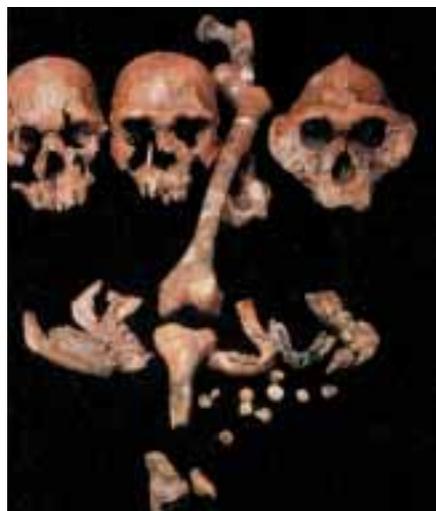
And William Fix, the author of an important book on the subject of paleoanthropology, makes this comment:

As we have seen, there are numerous scientists and popularizers today who have the temerity to tell us that there is 'no doubt' how man originated. If only they had the evidence...<sup>182</sup>

This claim of evolution, which "lacks any evidence," starts the human family tree with a group of apes that have been claimed to constitute a distinct genus, *Australopithecus*. According to the claim, *Australopithecus* gradually began to walk upright, his brain grew, and he passed through a series of stages until he arrived at man's present state (*Homo sapiens*). But the fossil record does not support this scenario. Despite the claim that all kinds of intermediate forms exist, there is an impassable barrier between the fossil remains of man and those of apes. Furthermore, it has been revealed that the species which are portrayed as each other's ancestors are actually contemporary species that lived in the same period. Ernst Mayr, one of the most important proponents of the theory of evolution in the twentieth century, contends in his book *One Long Argument* that "particularly historical [puzzles] such as the origin of life or of *Homo sapiens*, are extremely difficult and may even resist a final, satisfying explanation."<sup>183</sup>

But what is the basis for the human evolution thesis put forward by evolutionists? It is the existence of plenty of fossils on which evolutionists are able to build imaginary interpretations. Throughout history, more than 6,000 species of ape have lived, and most of them have become extinct. Today, only 120 species live on the earth. These 6,000 or so species of ape, most of which are extinct, constitute a rich resource for the evolutionists.

On the other hand, there are considerable differences in the anatomic makeup of the various human races. Furthermore, the differences were even greater between prehistoric races, because as time has passed the human races have to some extent mixed with each other and become assimilated. Despite this, important differences are still seen between different population groups living in the world today, such as, for example, Scandinavians, African pygmies, Inuits, native Australians, and many others.



**There is no scientific evidence for the claim that man evolved. What is put forward as "proof" is nothing but one-sided comment on a few fossils.**

There is no evidence to show that the fossils called *hominid* by evolutionary paleontologists do not actually belong to different species of ape or to vanished races of humans. To put it another way, no example of a transitional form between mankind and apes has been found.

After these general explanations, let us now examine the human evolution hypothesis together.

### **The Imaginary Family Tree of Man**

The Darwinist claim holds that modern man evolved from some kind of ape-like creature. During this alleged evolutionary process, which is supposed to have started from 5 to 6 million years ago, it is claimed that there existed some transitional forms between modern man and his ancestors. According to this completely imaginary scenario, the following four basic categories are listed:

1. Australopithecines (any of the various forms belonging to the genus *Australopithecus*)

2. *Homo habilis*

3. *Homo erectus*

4. *Homo sapiens*

Evolutionists call the genus to which the alleged ape-like ancestors of man belonged *Australopithecus*, which means "southern ape." *Australopithecus*, which is nothing but an old type of ape that has become extinct, is found in various different forms. Some of them are larger and strongly built ("robust"), while others are smaller and delicate ("gracile").

Evolutionists classify the next stage of human evolution as the genus *Homo*, that is "man." According to the evolutionist claim, the living things in the *Homo* series are more developed than *Australopithecus*, and not very different from modern man. The modern man of our day, that is, the species *Homo sapiens*, is said to have formed at the latest stage of the evolution of this genus *Homo*. Fossils like "Java man," "Peking man," and "Lucy," which appear in the media from time to time and are to be found in evolutionist publications and textbooks, are included in one of the four groups listed above. Each of these groupings is also assumed to branch into species and sub-species, as the case may be. Some suggested transitional forms of the past, such as *Ramapithecus*, had to be excluded

from the imaginary human family tree after it was realised that they were ordinary apes.<sup>184</sup>

By outlining the links in the chain as "australopithecines > *Homo habilis* > *Homo erectus* > *Homo sapiens*," the evolutionists imply that each of these types is the ancestor of the next. However, recent findings by paleoanthropologists have revealed that australopithecines, *Homo habilis* and *Homo erectus* existed in different parts of the world at the same time. Moreover, some of those humans classified as *Homo erectus* probably lived up until very modern times. In an article titled "Latest *Homo erectus* of Java: Potential Contemporaneity with *Homo sapiens* in Southeast Asia," it was reported in the journal that *Homo erectus* fossils found in Java had "mean ages of  $27 \pm 2$  to  $53.3 \pm 4$  thousand years ago" and this "raise[s] the possibility that *H. erectus* overlapped in time with anatomically modern humans (*H. sapiens*) in Southeast Asia"<sup>185</sup>

Furthermore, *Homo sapiens neanderthalensis* (Neanderthal man) and *Homo sapiens sapiens* (modern man) also clearly co-existed. This situation apparently indicates the invalidity of the claim that one is the ancestor of the other.

Intrinsically, all the findings and scientific research have revealed that the fossil record does not suggest an evolutionary process as evolutionists propose. The fossils, which evolutionists claim to be the ancestors of humans, in fact belong either to different human races, or else to species of ape.

Then which fossils are human and which ones are apes? Is it ever possible for any one of them to be considered a transitional form? In order to find the answers, let us have a closer look at each category.

### ***Australopithecus***

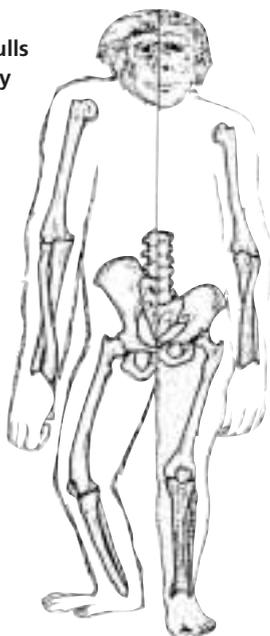
The first category, the genus *Australopithecus*, means "southern ape," as we have said. It is assumed that these creatures first appeared in Africa about 4 million years ago, and lived until 1 million years ago. There are a number of different species among the australopithecines. Evolutionists assume that the oldest *Australopithecus* species is *A. afarensis*. After that comes *A. africanus*, and then *A. robustus*, which has relatively bigger bones. As for *A. Boisei*, some researchers accept it as a different species, and others

as a sub-species of *A. Robustus*.

All of the *Australopithecus* species are extinct apes that resemble the apes of today. Their cranial capacities are the same or smaller than the chimpanzees of our day. There are projecting parts in their hands and feet which they used to climb trees, just like today's chimpanzees, and their feet are built for grasping to hold onto branches. Many other characteristics—such as the details in their skulls, the closeness of their eyes, their sharp molar teeth, their mandibular structure, their long arms, and their short legs—constitute evidence that these creatures were no different from today's ape. However, evolutionists claim that, although australopithecines have the anatomy of apes, unlike apes, they walked upright like humans.

This claim that australopithecines **walked upright** is a view that has been held by paleoanthropologists such as Richard Leakey and Donald C. Johanson for decades. Yet many scientists who have carried out a great deal of research on the skeletal structures of australopithecines have proved the invalidity of that argument. Extensive research done on

*Australopithecus* skulls and skeletons closely resemble those of modern apes. The drawing to the side shows a chimpanzee on the left, and an *Australopithecus afarensis* skeleton on the right. Adrienne L. Zihlman, the professor of anatomy who did the drawing, stresses that the structures of the two skeletons are very similar.

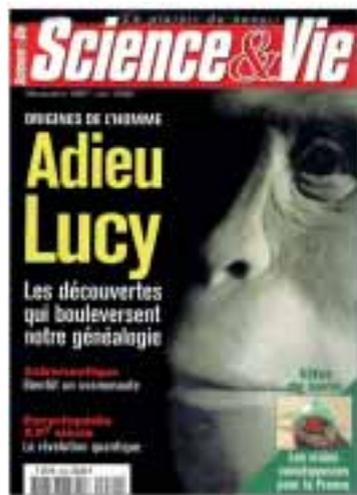


An *Australopithecus robustus* skull. It bears a close resemblance to that of modern apes.

various *Australopithecus* specimens by two world-renowned anatomists from England and the USA, Lord Solly Zuckerman and Prof. Charles Oxnard, showed that these creatures did not walk upright in human manner. Having studied the bones of these fossils for a period of 15 years thanks to grants from the British government, Lord Zuckerman and his team of five specialists reached the conclusion that **australopithecines were only an ordinary species of ape, and were definitely not bipedal**, although Zuckerman is an evolutionist himself.<sup>186</sup> Correspondingly, Charles E. Oxnard, who is another evolutionary anatomist famous for his research on the subject, also likened the skeletal structure of australopithecines to that of modern orangutans.<sup>187</sup>

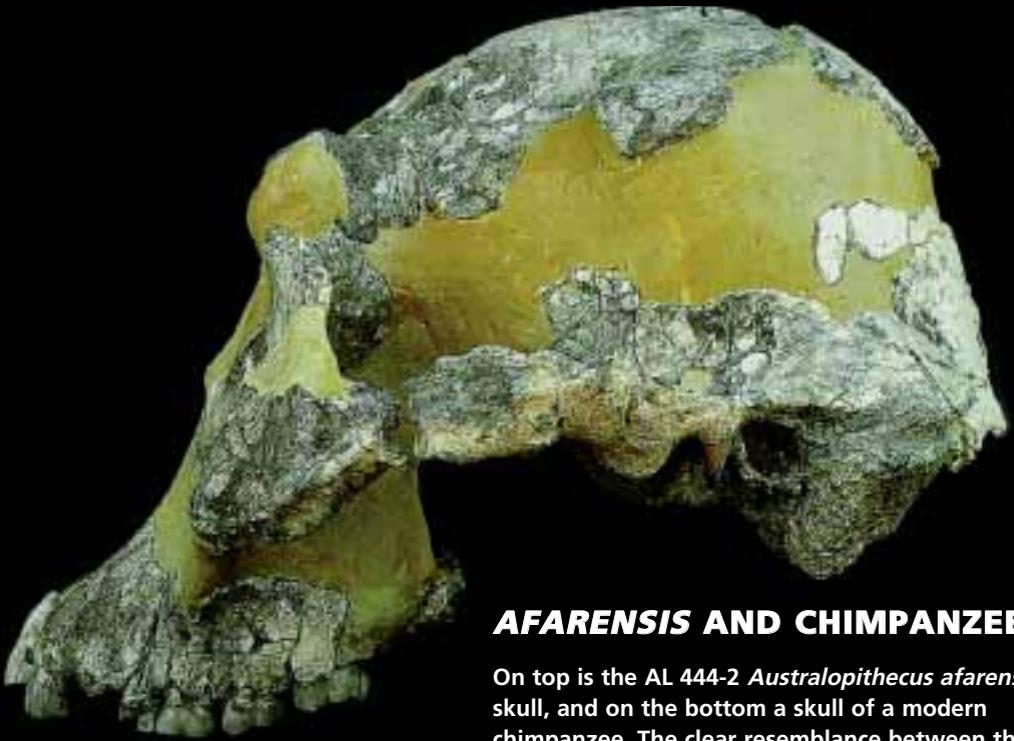
That *Australopithecus* cannot be counted an ancestor of man has recently been accepted by evolutionist sources. The famous French popular scientific magazine *Science et Vie* made the subject the cover of its May 1999 issue. Under the headline "Adieu Lucy"—Lucy being the most important fossil example of the species *Australopithecus afarensis*—the magazine reported that apes of the species *Australopithecus* would have to be removed from the human family tree. In this article, based on the discovery of another *Australopithecus* fossil known simply as St W573, the following sentences appear:

A new theory states that the genus *Australopithecus* is not the root of the human race... The results arrived at by the only woman authorized to examine St W573 are different from the normal theories regarding mankind's ancestors: this destroys the hominid family tree. Large primates, considered the ancestors of man, have been removed from the equation of this family tree... *Australopithecus* and *Homo* (human) species do not appear on the same branch. Man's direct ancestors are still waiting to be discovered.<sup>188</sup>



#### "GOODBYE, LUCY"

Scientific discoveries have left evolutionist assumptions regarding "Lucy," once considered the most important example of the *Australopithecus* genus, completely unfounded. The famous French scientific magazine, *Science et Vie*, accepted this truth under the headline "Goodbye, Lucy," in its February 1999 issue, and confirmed that *Australopithecus* cannot be considered an ancestor of man.



## **AFARENSIS AND CHIMPANZEES**

On top is the AL 444-2 *Australopithecus afarensis* skull, and on the bottom a skull of a modern chimpanzee. The clear resemblance between them is an evident sign that *A. afarensis* is an ordinary species of ape, with no human characteristics.



### ***Homo Habilis***

The great similarity between the skeletal and cranial structures of australopithecines and chimpanzees, and the refutation of the claim that these creatures walked upright, have caused great difficulty for evolutionary paleoanthropologists. The reason is that, according to the imaginary evolution scheme, *Homo erectus* comes after *Australopithecus*. As the genus name *Homo* (meaning "man") implies, *Homo erectus* is a human species, and its skeleton is straight. Its cranial capacity is twice as large as that of *Australopithecus*. A direct transition from *Australopithecus*, which is a chimpanzee-like ape, to *Homo erectus*, which has a skeleton no different from modern man's, is out of the question, even according to evolutionist theory. Therefore, "links"—that is, transitional forms—are needed. The concept of *Homo habilis* arose from this necessity.

The classification of *Homo habilis* was put forward in the 1960s by the Leakeys, a family of "fossil hunters." According to the Leakeys, this new species, which they classified as *Homo habilis*, had a relatively large cranial capacity, the ability to walk upright and to use stone and wooden tools. Therefore, it could have been the ancestor of man.

New fossils of the same species unearthed in the late 1980s were to completely change this view. Some researchers, such as Bernard Wood and C. Loring Brace, who relied on those newly-found fossils, stated that *Homo habilis* (which means "skillful man," that is, man capable of using tools), should be classified as *Australopithecus habilis*, or "skillful southern ape," because *Homo habilis* had a lot of characteristics in common with the australopithecine apes. It had long arms, short legs and an ape-like skeletal structure just like *Australopithecus*. Its fingers and toes were suitable for climbing. Their jaw was very similar to that of today's apes. Their 600 cc average cranial capacity is also an indication of the fact that they were apes. In short, *Homo habilis*, which was presented as a different species by some evolutionists, was in reality an ape species just like all the other australopithecines.

Research carried out in the years since Wood and Brace's work has demonstrated that *Homo habilis* was indeed no different from *Australopithecus*. The skull and skeletal fossil OH62 found by Tim White showed that this species had a small cranial capacity, as well as long arms

and short legs, which enabled them to climb trees just like modern apes do.

The detailed analyses conducted by American anthropologist Holly Smith in 1994 indicated that *Homo habilis* was not *Homo*, in other words, human, at all, but rather unequivocally an ape. Speaking of the analyses she made on the teeth of *Australopithecus*, *Homo habilis*, *Homo erectus* and *Homo neanderthalensis*, Smith stated the following;

Restricting analysis of fossils to specimens satisfying these criteria, patterns of dental development of gracile **australopithecines and *Homo Habilis* remain classified with African apes.** Those of *Homo erectus* and Neanderthals are classified with humans.<sup>189</sup>

Within the same year, Fred Spoor, Bernard Wood and Frans Zonneveld, all specialists on anatomy, reached a similar conclusion through a totally different method. This method was based on the comparative analysis of the semicircular canals in the inner ear of humans and apes, which allow them to maintain their balance. Spoor, Wood and Zonneveld concluded that:

Among the fossil hominids the earliest species to demonstrate the modern human morphology is *Homo erectus*. In contrast, the semi-circular canal dimensions in crania from southern Africa attributed to *Australopithecus* and *Paranthropus* resemble those of the extant great apes.<sup>190</sup>

Spoor, Wood and Zonneveld also studied a *Homo habilis* specimen, namely Stw 53, and found out that "Stw 53 relied less on bipedal behavior than the australopithecines." This meant that the *H. habilis* specimen was even more ape-like than the *Australopithecus* species. Thus they concluded that "Stw 53 represents an unlikely intermediate between the morphologies

**Femur KNM-ER 1472. This femur is no different from that of modern man. The finding of this fossil in the same layer as *Homo habilis* fossils, although a few kilometers away, gave rise to incorrect opinions, such as that *Homo habilis* was bipedal. Fossil OH 62, found in 1987, showed that *Homo habilis* was not bipedal, as had been believed. Many scientists today accept that *Homo habilis* was a species of ape very similar to *Australopithecus*.**





Fred Spoor

The claim that *Australopithecus* and *Homo habilis* walked upright was disproved by inner ear analyses carried out by Fred Spoor. He and his team compared the centers of balances in the inner ears, and showed that both moved in a similar way to apes of our own time.

seen in the australopithecines and *H. erectus*."<sup>191</sup>

This finding yielded two important results:

1. Fossils referred to as *Homo habilis* did not actually belong to the genus *Homo*, i.e., humans, but to that of *Australopithecus*, i.e., apes.
2. Both *Homo habilis* and *Australopithecus* were creatures that walked stooped forward—that is to say, they had the skeleton of an ape. They have no relation whatsoever to man.

### **The Misconception about *Homo rudolfensis***

The term *Homo rudolfensis* is the name given to a few fossil fragments unearthed in 1972. The species supposedly represented by this fossil was designated *Homo rudolfensis* because these fossil fragments were found in the vicinity of Lake Rudolf in Kenya. Most paleoanthropologists accept that these fossils do not belong to a distinct species, but that the creature called *Homo rudolfensis* is in fact indistinguishable from *Homo habilis*.

Richard Leakey, who unearthed the fossils, presented the skull designated KNM-ER 1470, which he said was 2.8 million years old, as the greatest discovery in the history of anthropology. According to Leakey, this creature, which had a small cranial capacity like that of *Australopithecus* together with a face similar to that of present-day humans, was the missing link between *Australopithecus* and humans. Yet, after a

short while, it was realized that the human-like face of the KNM-ER 1470 skull, which frequently appeared on the covers of scientific journals and popular science magazines, was the result of the incorrect assembly of the skull fragments, which may have been deliberate. Professor Tim Bromage, who conducts studies on human facial anatomy, brought this to light by the help of computer simulations in 1992:

When it [KNM-ER 1470] was first reconstructed, the face was fitted to the cranium in an almost vertical position, much like the flat faces of modern humans. But recent studies of anatomical relationships show that in life the face must have jutted out considerably, **creating an ape-like aspect**, rather like the faces of *Australopithecus*.<sup>192</sup>

The evolutionary paleoanthropologist J. E. Cronin states the following on the matter:

... its relatively robustly constructed face, flattish naso-alveolar clivus, (recalling australopithecine dished faces), low maximum cranial width (on the temporals), strong canine juga and large molars (as indicated by remaining roots) are all relatively primitive traits which ally the specimen with members of the taxon *A. africanus*.<sup>193</sup>

C. Loring Brace from Michigan University came to the same conclusion. As a result of the analyses he conducted on the jaw and tooth structure of skull 1470, he reported that "from the size of the palate and the expansion of the area allotted to molar roots, it would appear that ER 1470 retained a fully *Australopithecus*-sized face and dentition."<sup>194</sup>

Professor Alan Walker, a paleoanthropologist from Johns Hopkins University who has done as much research on KNM-ER 1470 as Leakey, maintains that this creature should not be classified as a member of *Homo*—i.e., as a human species—but rather should be placed in the *Australopithecus* genus.<sup>195</sup>

In summary, classifications like *Homo habilis* or *Homo rudolfensis*, which are presented as transitional links between the australopithecines and *Homo erectus*, are entirely imaginary. It has been confirmed by many researchers today that these creatures are members of the *Australopithecus* series. All of their anatomical features reveal that they are species of apes.



**Richard Leakey misled both himself and the world of paleontology about *Homo rudolfensis*.**

This fact has been further established by two evolutionist anthropologists, Bernard Wood and Mark Collard, whose research was published in 1999 in *Science*. Wood and Collard explained that the *Homo habilis* and *Homo rudolfensis* (Skull 1470) taxa are imaginary, and that the fossils assigned to these categories should be attributed to the genus *Australopithecus*:

More recently, fossil species have been assigned to *Homo* on the basis of absolute brain size, inferences about language ability and hand function, and retrodictions about their ability to fashion stone tools. With only a few exceptions, the definition and use of the genus within human evolution, and the demarcation of *Homo*, have been treated as if they are unproblematic. But ... recent data, fresh interpretations of the existing evidence, and the limitations of the paleoanthropological record invalidate existing criteria for attributing taxa to *Homo*...in practice fossil hominin species are assigned to *Homo* on the basis of one or more out of four criteria. ... It is now evident, however, that none of these criteria is satisfactory. The Cerebral Rubicon is problematic because absolute cranial capacity is of questionable biological significance. Likewise, there is compelling evidence that language function cannot be reliably inferred from the gross appearance of the brain, and that the language-related parts of the brain are not as well localized as earlier studies had implied.....

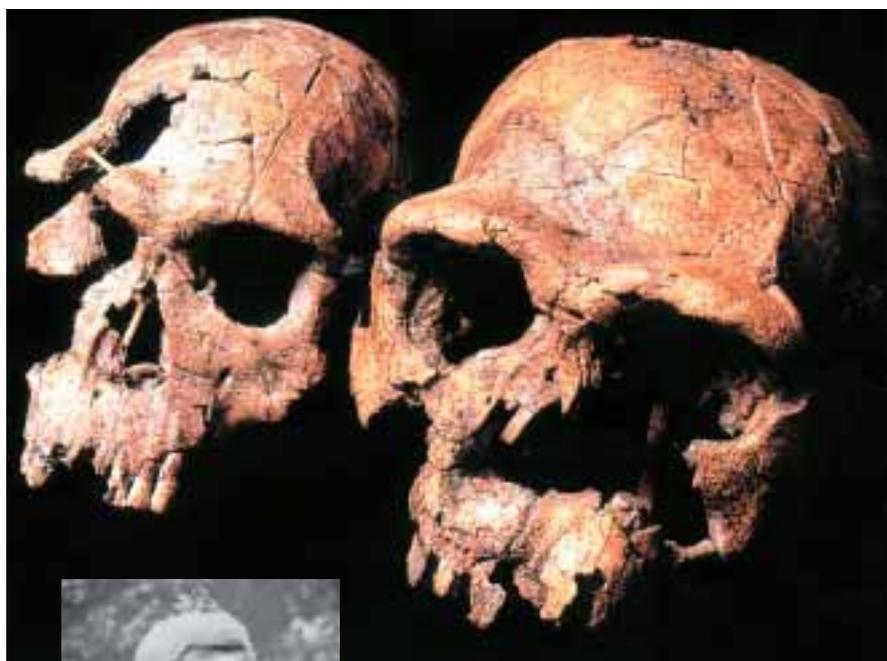
...In other words, with the hypodigms of *H. habilis* and *H. rudolfensis* assigned to it, the genus *Homo* is not a good genus. Thus, *H. habilis* and *H. rudolfensis* (or *Homo habilis* sensu lato for those who do not subscribe to the taxonomic subdivision of "early *Homo*") should be removed from *Homo*. The obvious taxonomic alternative, which is to transfer one or both of the taxa to one of the existing early hominin genera, is not without problems, but we recommend that, for the time being, both *H. habilis* and *H. rudolfensis* should be transferred to the genus *Australopithecus*.<sup>196</sup>

The conclusion of Wood and Collard corroborates the conclusion that we have maintained here: "Primitive human ancestors" do not exist in history. Creatures that are alleged to be so are actually apes that ought to be **assigned to the genus *Australopithecus***. The fossil record shows that there is no evolutionary link between these extinct apes and *Homo*, i.e., human species that suddenly appears in the fossil record.

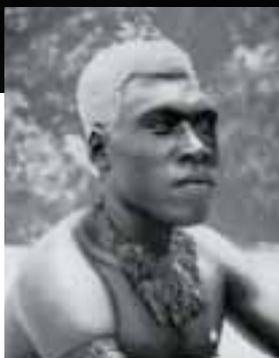
### ***Homo erectus***

According to the fanciful scheme suggested by evolutionists, the internal evolution of the *Homo* genus is as follows: First *Homo erectus*, then so-called "archaic" *Homo sapiens* and Neanderthal man (*Homo sapiens neanderthalensis*), and finally, Cro-Magnon man (*Homo sapiens sapiens*). However all these classifications are really only variations and unique races in the human family. The difference between them is no greater than the difference between an Inuit and an African, or a pygmy and a European.

Let us first examine *Homo erectus*, which is referred to as the most primitive human species. As the name implies, *Homo erectus* means "man who walks upright." Evolutionists have had to separate these fossils from earlier ones by adding the qualification of "erectness," because all the



The large eyebrow protrusions on *Homo erectus* skulls, and features such as the backward-sloping forehead, can be seen in a number of races in our own day, as in the Malaysian native shown here.

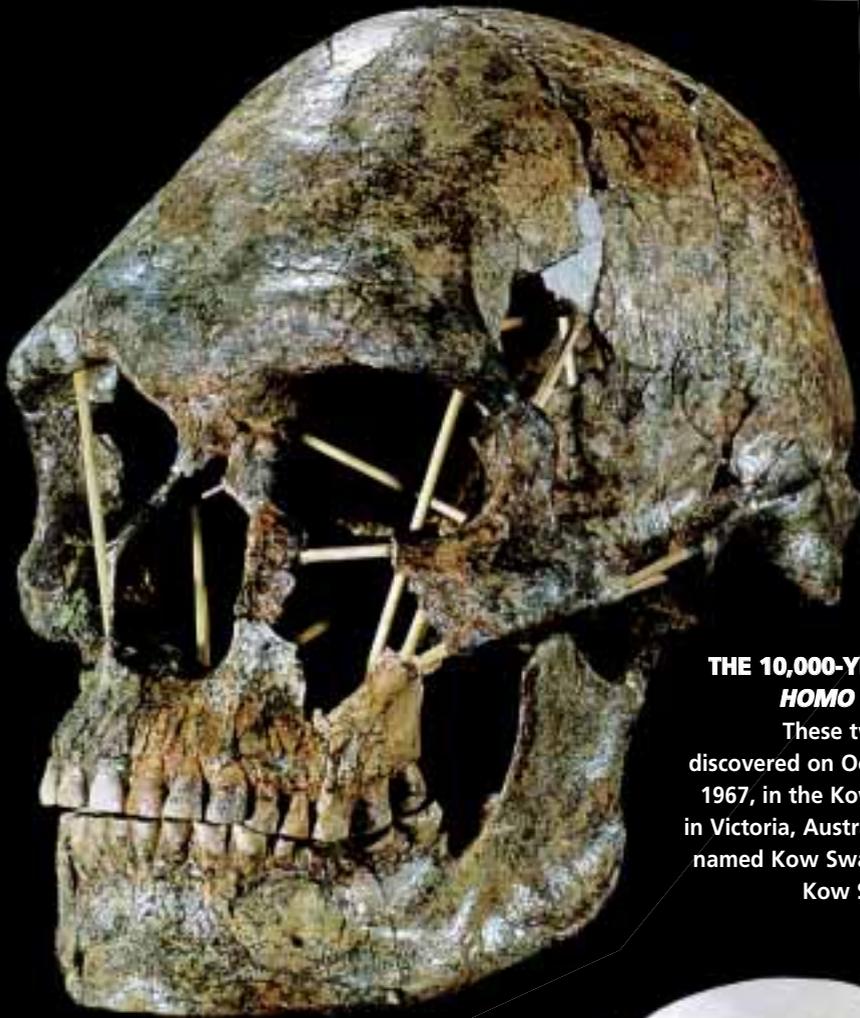


available *Homo erectus* fossils are straight to an extent not observed in any of the australopithecines or so-called *Homo habilis* specimens. **There is no difference between the postcranial skeleton of modern man and that of *Homo erectus*.**

The primary reason for evolutionists' defining *Homo erectus* as "primitive" is the cranial capacity of its skull (900-1,100 cc), which is smaller than the average modern man, and its thick eyebrow projections. **However, there are many people living today in the world who have the same cranial capacity as *Homo erectus*** (pygmies, for instance) and other races have protruding eyebrows (Native Australians, for instance). It is a commonly agreed-upon fact that differences in cranial capacity do not necessarily denote differences in intelligence or abilities. Intelligence depends on the internal organization of the brain, rather than on its volume.<sup>197</sup>

The fossils that have made *Homo erectus* known to the entire world are those of **Peking man** and **Java man** in Asia. However, in time it was realized that these two fossils are not reliable. Peking man consists of some elements made of plaster whose originals have been lost, and Java man is composed of a skull fragment plus a pelvic bone that was found yards away from it with no indication that these belonged to the same creature. This is why the *Homo erectus* fossils found in Africa have gained such increasing importance. (It should also be noted that some of the fossils said to be *Homo erectus* were included under a second species named *Homo ergaster* by some evolutionists. There is disagreement among the experts on this issue. We will treat all these fossils under the classification of *Homo erectus*.)

The most famous of the *Homo erectus* specimens found in Africa is the fossil of "Narikotome *Homo erectus*," or the "**Turkana Boy**," which was found near Lake Turkana in Kenya. It is confirmed that the fossil was that of a 12-year-old boy, who would have been 1.83 meters tall in adolescence. The upright skeletal structure of the fossil is no different from that of modern man. The American paleoanthropologist Alan Walker said that he doubted that "the average pathologist could tell the difference between the fossil skeleton and that of a modern human." Concerning the skull, Walker wrote that he laughed when he saw it because "it looked so much like a Neanderthal."<sup>198</sup> As we will see in the next chapter, Neanderthals are a modern human race. Therefore, *Homo erectus* is also a modern human race.



**THE 10,000-YEAR-OLD  
*HOMO ERECTUS***

These two skulls, discovered on October 10, 1967, in the Kow Swamp in Victoria, Australia, were named Kow Swamp I and Kow Swamp V.

Alan Thorne and Phillip Macumber, who discovered the skulls, interpreted them both as *Homo sapiens* skulls, whereas they actually contained many features reminiscent of *Homo erectus*. The only reason they were treated as *Homo sapiens* was the fact that they were calculated to be 10,000 years old. Evolutionists did not wish to accept the fact that *Homo erectus*, which they considered a "primitive" species and which lived 500,000 years before modern man, was a human race which had lived 10,000 years ago.





**HOMO ERECTUS AND THE ABORIGINES**  
 The Turkana Boy skeleton shown at the side is the best preserved example of *Homo erectus* that has so far been discovered. The interesting thing is that there is no major difference between this 1.6 million-year-old-fossil and people of our day. The Australian aboriginal skeleton above particularly resembles Turkana Boy. This situation reveals once again that *Homo erectus* was a genuine human race, with no "primitive" features.

Even the evolutionist Richard Leakey states that the differences between *Homo erectus* and modern man are no more than racial variance:

One would also see differences: in the shape of the skull, in the degree of protrusion of the face, the robustness of the brows and so on. **These differences are probably no more pronounced than we see today between the separate geographical races of modern humans.** Such biological variation arises when populations are geographically separated from each other for significant lengths of time.<sup>199</sup>



### HOMO ERECTUS'S SAILING CULTURE

"Ancient mariners: Early humans were much smarter than we suspected" According to this article in the March 14, 1998, issue of *New Scientist*, the people that evolutionists call *Homo erectus* were sailing 700,000 years ago. It is impossible, of course, to think of people who possessed the knowledge, technology and culture to go sailing as primitive.

Professor William Laughlin from the University of Connecticut made extensive anatomical examinations of Inuits and the people living on the Aleut islands, and noticed that these people were extraordinarily similar to *Homo erectus*. The conclusion Laughlin arrived at was that all these distinct races were in fact different races of *Homo sapiens* (modern man):

When we consider the vast differences that exist between remote groups such as Eskimos and Bushmen, who are known to belong to the single species of *Homo sapiens*, it seems justifiable to conclude that *Sinanthropus* [an *erectus* specimen] belongs within this same diverse species.<sup>200</sup>

It is now a more pronounced fact in the scientific community that *Homo erectus* is a superfluous taxon, and that fossils assigned to the *Homo erectus* class are actually not so different from *Homo sapiens* as to be considered a different species. In *American Scientist*, the discussions over this issue and the result of a conference held on the subject in 2000 were summarized in this way:

Most of the participants at the Senckenberg conference got drawn into a flaming debate over the taxonomic status of *Homo erectus* started by Milford Wolpoff of the University of Michigan, Alan Thorne of the University of Canberra and their colleagues. They argued forcefully that *Homo erectus* had no validity as a species and should be eliminated altogether. All members of the genus *Homo*, from about 2 million years ago to the present, were one

highly variable, widely spread species, *Homo sapiens*, with no natural breaks or subdivisions. The subject of the conference, *Homo erectus*, didn't exist.<sup>201</sup>

The conclusion reached by the scientists defending the abovementioned thesis can be summarized as "*Homo erectus* is not a different species from *Homo sapiens*, but rather a race within *Homo sapiens*." On the other hand, there is a huge gap between *Homo erectus*, a human race, and the apes that preceded *Homo erectus* in the "human evolution" scenario (*Australopithecus*, *Homo Habilis*, and *Homo rudolfensis*). This means that the first men appeared in the fossil record suddenly and without any prior evolutionary history.

### ***Neanderthals: Their Anatomy and Culture***

Neanderthals (*Homo neanderthalensis*) were human beings who suddenly appeared 100,000 years ago in Europe, and who disappeared, or were assimilated by mixing with other races, quietly but quickly 35,000 years ago. Their only difference from modern man is that their skeletons are more robust and their cranial capacity slightly bigger.

Neanderthals were a human race, a fact which is admitted by almost everybody today. Evolutionists have tried very hard to present them as a "primitive species," yet all the findings indicate that they were no different from a "robust" man walking on the street today. A prominent authority on the subject, Erik Trinkaus, a paleoanthropologist from New Mexico University, writes:

Detailed comparisons of Neanderthal skeletal remains with those of modern humans have shown that **there is nothing in Neanderthal anatomy** that conclusively indicates locomotor, manipulative, intellectual, or linguistic abilities **inferior to those of modern humans**.<sup>202</sup>

Many contemporary researchers define Neanderthal man as a subspecies of modern man, and call him *Homo sapiens neanderthalensis*.

On the other hand, the fossil record shows that Neanderthals possessed an advanced culture. One of the most interesting examples of this is a fossilized flute made by Neanderthal people. This flute, made from the thighbone of a bear, was found by the archaeologist Ivan Turk in a cave in northern Yugoslavia in July 1995. Musicologist Bob Fink then analyzed it. Fink proved that this flute, thought by radio-carbon testing to

## NEANDERTHALS: A HUMAN RACE

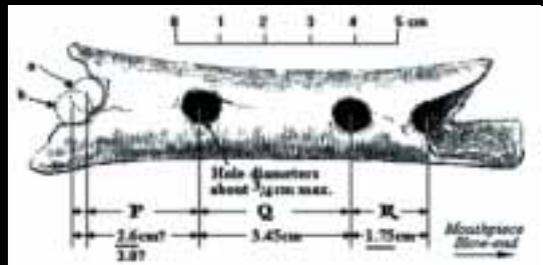
To the side is shown the *Homo sapiens neanderthalensis* Amud I skull, found in Israel. The owner is estimated to have been 1.80 meters tall. Its brain capacity is as big as that found today: 1,740 cc. Beneath, are shown a fossil skeleton from the Neanderthal race, and a stone tool believed to have been used by its owner. This and similar discoveries show that Neanderthals were a genuine human race who vanished over time.





## NEANDERTHAL SEWING NEEDLE

26,000-year-old needle: This interesting find shows that Neanderthals had the knowledge to make clothing tens of thousands of years ago (D. Johanson, B. Edgar, *From Lucy to Language*, page 99).



## NEANDERTHAL FLUTE

A Neanderthal flute made from bone. Calculations made from this artifact have shown that the holes were made to produce correct notes, in other words that this was an expertly designed instrument.

Above can be seen researcher Bob Fink's calculations regarding the flute.

Contrary to evolutionist propaganda, discoveries such as this show that Neanderthal people were civilized, not primitive cavemen (The AAAS Science News Service, "Neanderthals Lived Harmoniously," April 3, 1997).



### **COUNTERFACTUAL PROPAGANDA**

Although fossil discoveries show that Neanderthals had no "primitive" features as compared to us and were a human race, the evolutionist prejudices regarding them continue unabated. Neanderthal man is still sometimes described as an "ape man" in some evolutionist museums, as shown in the picture to the side. This is an indication how Darwinism rests on prejudice and propaganda, not on scientific discoveries.

be between 43,000 and 67,000 years old, produced four notes, and that it had half and full tones. This discovery shows that Neanderthals used the seven-note scale, the basic formula of western music. Fink, who examined the flute, states that "the distance between the second and third holes on the old flute is double that between the third and fourth." This means that the first distance represents a full note, and the distance next to it a half note. Fink says, "These three notes ... are inescapably diatonic and will sound like a near-perfect fit within any kind of standard diatonic scale, modern or antique," thus revealing that **Neanderthals were people with an ear for and knowledge of music.**<sup>203</sup>

Some other fossil discoveries show that Neanderthals buried their dead, looked after their sick, and used necklaces and similar adornments.<sup>204</sup>

A 26,000-year-old sewing needle, proved to have been used by

Neanderthal people, was also found during fossil excavations. This needle, which is made of bone, is exceedingly straight and has a hole for the thread to be passed through.<sup>205</sup> People who wear clothing and feel the need for a sewing needle cannot be considered "primitive."

The best research into the Neanderthals' tool-making abilities is that of Steven L. Kuhn and Mary C. Stiner, professors of anthropology and archaeology, respectively, at the University of New Mexico. Although these two scientists are proponents of the theory of evolution, the results of their archaeological research and analyses show that the **Neanderthals** who lived in caves on the coast of southwest Italy for thousands of years **carried out activities that required as complex a capacity for thought as modern-day human beings.**<sup>206</sup>

Kuhn and Stiner found a number of tools in these caves. The discoveries were of sharp, pointed cutting implements, including spearheads, made by carefully chipping away layers at the edges of the flint. Making sharp edges of this kind by chipping away layers is without a doubt a process calling for intelligence and skill. Research has shown that one of the most important problems encountered in that process is breakages that occur as a result of pressure at the edge of the stones. For this reason, the individual carrying out the process has to make fine judgments of the amount of force to use in order to keep the edges straight, and of the precise angle to strike at, if he is making an angled tool.

Margaret Conkey from the University of California explains that tools made in periods before the Neanderthals were also made by communities of intelligent people who were fully aware of what they were doing:

If you look at the things archaic humans made with their hands, Levallois cores and so on, that's not a bumbling kind of thing. They had an appreciation of the material they were working with, an understanding of their world.<sup>207</sup>

In short, scientific discoveries show that Neanderthals were a human race no different from us on the levels of intelligence and dexterity. This race either disappeared from history by assimilating and mixing with other races, or became extinct in some unknown manner. But they were definitely not "primitive" or "half-ape."

## **Archaic *Homo sapiens*, *Homo heidelbergensis* and Cro-Magnon Man**

Archaic *Homo sapiens* is the last step before contemporary man in the imaginary evolutionary scheme. In fact, evolutionists do not have much to say about these fossils, as there are only very minor differences between them and modern human beings. Some researchers even state that representatives of this race are still living today, and point to native Australians as an example. Like *Homo sapiens* (archaic), native Australians also have thick protruding eyebrows, an inward-inclined mandibular structure, and a slightly smaller cranial capacity.

The group characterized as *Homo heidelbergensis* in evolutionist literature is in fact the same as archaic *Homo sapiens*. The reason why two different terms are used to define the same human racial type is the disagreements among evolutionists. All the fossils included under the



A typical Cro-magnon skull.

*Homo heidelbergensis* classification suggest that people who were anatomically very similar to modern Europeans lived 500,000 and even 740,000 years ago, in England and in Spain.

It is estimated that Cro-Magnon man lived 30,000 years ago. He has a dome-shaped cranium and a broad forehead. His cranium of 1,600 cc is above the average for contemporary man. His skull has thick eyebrow projections and a bony protrusion at the back that is characteristic of both Neanderthal man and *Homo erectus*.

Although the Cro-Magnon is considered to be a European race, the structure and volume of Cro-Magnon's cranium look very much like those of some races living in Africa and the tropics today. Relying on this similarity, it is estimated that Cro-Magnon was an archaic African race. Some other paleoanthropological finds have shown that the Cro-Magnon and the Neanderthal races intermixed and laid the foundations for the races of our day.

As a result, none of these human beings were "primitive species." They were different human beings who lived in earlier times and either assimilated and mixed with other races, or became extinct and disappeared from history.

### **The Collapse of the Family Tree**

What we have investigated so far forms a clear picture: The scenario of "human evolution" is a complete fiction. In order for such a family tree to represent the truth, a gradual evolution from ape to man must have taken place and a fossil record of this process should be able to be found. In fact, however, there is a huge gap between apes and humans. Skeletal structures, cranial capacities, and such criteria as walking upright or bent sharply forward distinguish humans from apes. (We already mentioned that on the basis of recent research done in 1994 on the inner ear, *Australopithecus* and *Homo habilis* were reclassified as apes, while *Homo erectus* was reclassified as a fully modern human.)

Another significant finding proving that there can be no family-tree relationship among these different species is that species that are presented as ancestors of others in fact lived concurrently. If, as evolutionists claim, *Australopithecus* changed into *Homo habilis*, which, in

turn, turned into *Homo erectus*, the periods they lived in should necessarily have followed each other. However, there is no such chronological order to be seen in the fossil record.

According to evolutionist estimates, *Australopithecus* lived from 4 million up until 1 million years ago. The creatures classified as *Homo habilis*, on the other hand, are thought to have lived until 1.7 to 1.9 million years ago. *Homo rudolfensis*, which is said to have been more "advanced" than *Homo habilis*, is known to be as old as from 2.5 to 2.8 million years! That is to say, *Homo rudolfensis* is nearly 1 million years older than *Homo habilis*, of which it is alleged to have been the "ancestor." On the other hand, the age of *Homo erectus* goes as far back as 1.6-1.8 million years ago, which means that *Homo erectus* appeared on the earth in the same time frame as its so-called ancestor, *Homo habilis*.

Alan Walker confirms this fact by stating that "there is evidence from East Africa for late-surviving small *Australopithecus* individuals that were contemporaneous first with *H. Habilis*, then with *H. erectus*."<sup>208</sup> Louis Leakey has found fossils of *Australopithecus*, *Homo habilis* and *Homo erectus* almost next to each other in the Olduvai Gorge region of Tanzania, in the Bed II layer.<sup>209</sup>

There is definitely no such family tree. Stephen Jay Gould, the paleontologist from Harvard University, explains this deadlock faced by evolution, although he is an evolutionist himself:

**What has become of our ladder** if there are three coexisting lineages of hominids (*A. africanus*, the robust australopithecines, and *H. habilis*), none clearly derived from another? Moreover, none of the three display any evolutionary trends during their tenure on earth.<sup>210</sup>

When we move on from *Homo erectus* to *Homo sapiens*, we again see that there is no family tree to talk about. There is evidence showing that *Homo erectus* and archaic *Homo sapiens* continued living up to 27,000 years and even as recently as 10,000 years before our time. In the Kow Swamp in Australia, some 13,000-year-old *Homo erectus* skulls have been found. On the island of Java, *Homo erectus* remains were found that are 27,000 years old.<sup>211</sup>

One of the most surprising discoveries in this area was the 30,000-year-old *Homo erectus*, Neanderthal, and *Homo sapiens* fossils found in Java in 1996. *The New York Times* wrote in its cover story: "Until about a couple

of decades ago, scientists conceived of the human lineage as a neat progression of one species to the next and generally thought it impossible that two species could have overlapped in place or time."<sup>212</sup>

This discovery reveals once again the invalidity of the "evolutionary tree" scenario regarding the origin of man.

### **Latest Evidence: *Sahelanthropus tchadensis* and The Missing Link That Never Was**

The latest evidence to shatter the evolutionary theory's claim about the origin of man is the new fossil *Sahelanthropus tchadensis* unearthed in the Central African country of Chad in the summer of 2002.

The fossil has set the cat among the pigeons in the world of Darwinism. In its article giving news of the discovery, the world-renowned journal *Nature* admitted that "New-found skull could sink our current ideas about human evolution."<sup>213</sup>

Daniel Lieberman of Harvard University said that "This [discovery] will have the impact of a small nuclear bomb."<sup>214</sup>

The reason for this is that although the fossil in question is 7 million years old, it has a more "human-like" structure (according to the criteria evolutionists have hitherto used) than the 5 million-year-old *Australopithecus* ape species that is alleged to be "mankind's oldest ancestor." This shows that the evolutionary links established between extinct ape species based on the highly subjective and prejudiced criterion of "human similarity" are totally imaginary.

John Whitfield, in his article "Oldest Member of Human Family Found" published in *Nature* on July, 11, 2002, confirms this view quoting from Bernard Wood, an evolutionist anthropologist from George Washington University in Washington:

"When I went to medical school in 1963, human evolution looked like a ladder." he [Bernard Wood] says. The ladder stepped from monkey to man through a progression of intermediates, each slightly less ape-like than the last. Now human evolution looks like a bush. We have a menagerie of fossil hominids... How they are related to each other and which, if any of them, are human forebears is still debated.<sup>215</sup>

The comments of Henry Gee, the senior editor of *Nature* and a leading

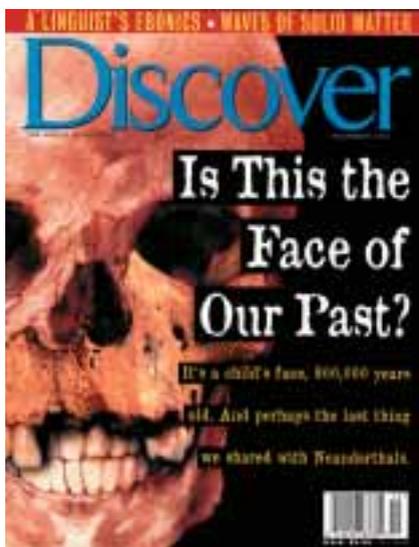
paleoanthropologist, about the newly discovered ape fossil are very noteworthy. In his article published in *The Guardian*, Gee refers to the debate about the fossil and writes:

Whatever the outcome, the skull shows, once and for all, that the old idea of a 'missing link' is bunk... It should now be quite plain that the very idea of the missing link, always shaky, is now completely untenable.<sup>216</sup>

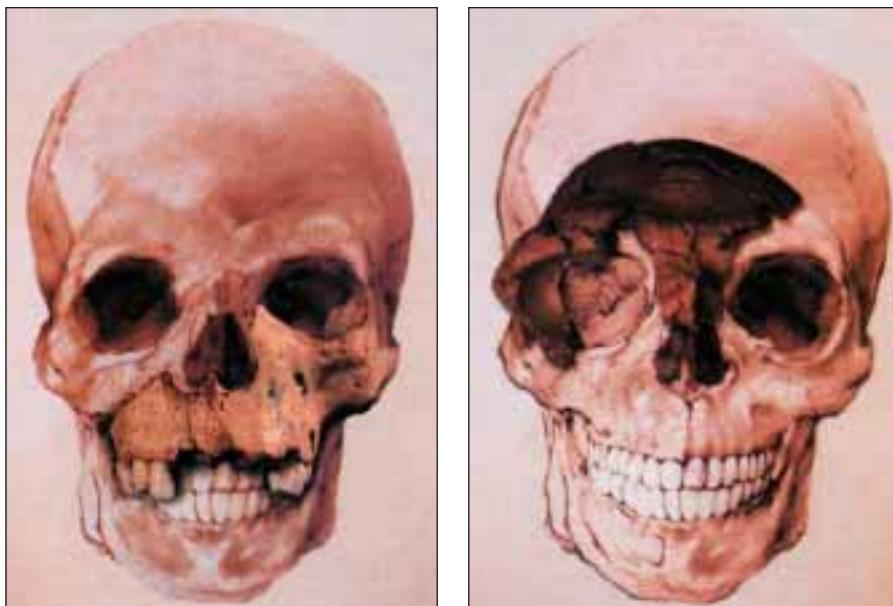
### **The Secret History of *Homo sapiens***

The most interesting and significant fact that nullifies the very basis of the imaginary family tree of evolutionary theory is **the unexpectedly ancient history of modern man**. Paleoanthropological findings reveal that *Homo sapiens* people who looked exactly like us were living as long as 1 million years ago.

It was Louis Leakey, the famous evolutionary paleoanthropologist, who discovered the first findings on this subject. In 1932, in the Kanjera region around Lake Victoria in Kenya, Leakey found several fossils that belonged to the Middle Pleistocene and that were no different from modern man. However, the Middle Pleistocene was a million years ago.<sup>217</sup> Since these discoveries turned the evolutionary family tree upside down, they were dismissed by some evolutionary paleoanthropologists. Yet Leakey always contended that his estimates were correct.



A face bone discovered in Atapuerca in Spain, showing that people with the same facial structure as us were living 800,000 years ago.



**The skull reconstructed from the Atapuerca fossil (left) bears an incredible resemblance to that of modern man (right).**

Just when this controversy was about to be forgotten, a fossil unearthed in Spain in 1995 revealed in a very remarkable way that the history of *Homo sapiens* was much older than had been assumed. The fossil in question was uncovered in a cave called Gran Dolina in the Atapuerca region of Spain by three Spanish paleoanthropologists from the University of Madrid. The fossil revealed the face of an 11-year-old boy who looked entirely like modern man. Yet, it had been 800,000 years since the child died. *Discover* magazine covered the story in great detail in its December 1997 issue.

This fossil even shook the convictions of Juan Luis Arsuaga Ferreras, who lead the Gran Dolina excavation. Ferreras said:

We expected something big, something large, something inflated—you know, something primitive... Our expectation of an 800,000-year-old boy was something like Turkana Boy. And what we found was a totally modern face.... To me this is most spectacular—these are the kinds of things that shake you. Finding something totally unexpected like that. Not finding fossils; finding fossils is unexpected too, and it's okay. But the most spectacular thing is finding something you thought belonged to the present,

in the past. It's like finding something like—like a tape recorder in Gran Dolina. That would be very surprising. **We don't expect cassettes and tape recorders in the Lower Pleistocene. Finding a modern face 800,000 years ago—it's the same thing.** We were very surprised when we saw it.<sup>218</sup>

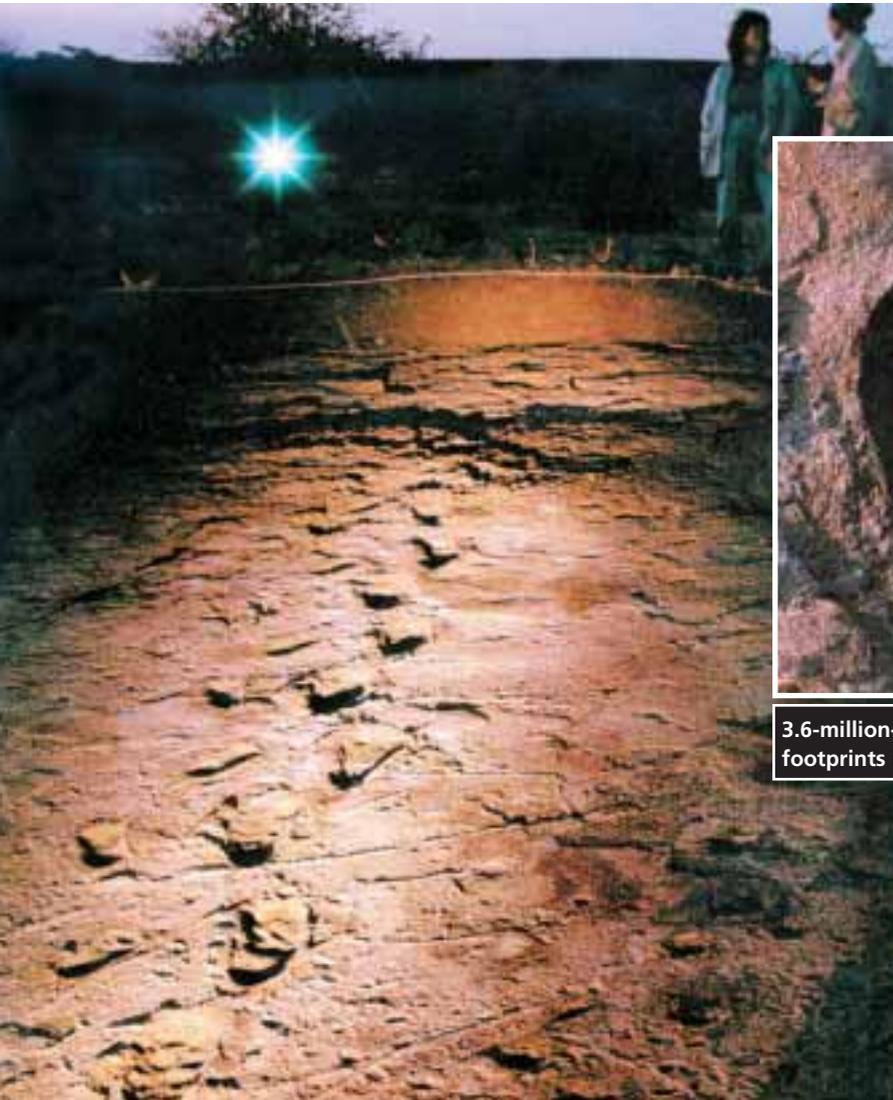
The fossil highlighted the fact that the history of *Homo sapiens* had to be extended back to 800,000 years ago. After recovering from the initial shock, the evolutionists who discovered the fossil decided that it belonged to a different species, because according to the evolutionary family tree, *Homo sapiens* did not live 800,000 years ago. Therefore, they made up an imaginary species called *Homo antecessor* and included the Atapuerca skull under this classification.

## **Huts and Footprints**

There have been many findings demonstrating that *Homo sapiens* dates back even earlier than 800,000 years. One of them is a discovery by Louis Leakey in the early 1970s in Olduvai Gorge. Here, in the Bed II layer, Leakey discovered that *Australopithecus*, *Homo habilis* and *Homo erectus* species had co-existed at the same time. What is even more interesting was a structure Leakey found in the same layer (Bed II). Here, he found the remains of a stone hut. The unusual aspect of the event was that this construction, which is still used in some parts of Africa, could only have been built by *Homo sapiens*! So, according to Leakey's findings, *Australopithecus*, *Homo habilis*, *Homo erectus* and modern man must have co-existed approximately 1.7 million years ago.<sup>219</sup> This discovery must surely invalidate the evolutionary theory that claims that modern man evolved from ape-like species such as *Australopithecus*.

Indeed, some other discoveries trace the origins of modern man back to 1.7 million years ago. One of these important finds is the footprints found in Laetoli, Tanzania, by Mary Leakey in 1977. These footprints were found in a layer that was calculated to be 3.6 million years old, and more importantly, they were no different from the footprints that a contemporary man would leave.

The footprints found by Mary Leakey were later examined by a number of famous paleoanthropologists, such as Donald Johanson and Tim White. The results were the same. White wrote:



3.6-million-year-old human footprints in Laetoli, in Tanzania.

Make no mistake about it,... **They are like modern human footprints.** If one were left in the sand of a California beach today, and a four-year old were asked what it was, he would instantly say that somebody had walked there. He wouldn't be able to tell it from a hundred other prints on the beach, nor would you.<sup>220</sup>

After examining the footprints, Louis Robbins from the University of North California made the following comments:

The arch is raised — the smaller individual had a higher arch than I do — and the big toe is large and aligned with the second toe ... The toes grip the ground like human toes. You do not see this in other animal forms.<sup>221</sup>

Examinations of the morphological form of the footprints showed time and again that they had to be accepted as the prints of a human, and

## AL 666-1: A 2.3-MILLION-YEAR-OLD HUMAN JAW

Fossil AL 666-1 was found in Hadar in Ethiopia, together with *A. afarensis* fossils. This 2.3-million-year-old jaw bone had features identical to those of *Homo sapiens*.

AL 666-1 resembled neither the *A. afarensis* jawbones that were found with it, nor a 1.75-million-year-old *Homo habilis* jaw. The jaws of these two species, with their narrow and rectangular shapes, resembled those of

present-day apes.

Although there is no doubt that AL 666-1 belonged to a "*Homo*" (human) species, evolutionary paleontologists do not accept this fact. They refrain from making any comment on this, because the jaw is calculated to be 2.3 million years old—in other words, much older than the age they allow for the *Homo*, or human, race.



The AL 666-1, 2.3-million-year-old *Homo sapiens* (human) jaw.



Side view of AL 666-1



AL 222-1 fossil, an *A. afarensis* jaw from the same period as AL 666-1.



AL 222-1 – a side view. The side views of the two jaws make the difference between the two fossils clearer.

The AL 222-1 jaw protrudes forwards. This is an ape-like feature. But the AL 666-1 jaw on top is a completely human one.

# SKELETAL VARIATION AMONG MODERN HUMAN RACES

Evolutionary paleontologists portray different *Homo erectus*, *Homo sapiens neanderthalensis*, and archaic *Homo sapiens* human fossils as indicating different species or subspecies on the evolutionary path. They base this on the differences between these fossil skulls. However, these differences actually consist of variations among different human races that have existed, some of which have become extinct or have been assimilated. These differences have

grown less pronounced as human races have intermixed over time.

Despite this, quite striking differences can still be observed between human races living today. The skulls in these pages, all belonging to modern human beings (*Homo sapiens sapiens*), are all examples of these differences. To show similar structural differences between races that lived in the past as evidence for evolution is quite simply bias.



Native Peruvian from the fifteenth century.



Middle-aged Bengali.



Male from the Solomon Islands (Melanesia) who died in 1893.



German male aged 25-30.



Male Congolese aged 35-40.



Male Inuit aged 35-40.

moreover, a modern human (*Homo sapiens*). Russell Tuttle, who also examined the footprints, wrote:

A small barefoot *Homo sapiens* could have made them... In all discernible morphological features, **the feet of the individuals that made the trails are indistinguishable from those of modern humans.**<sup>222</sup>

Impartial examinations of the footprints revealed their real owners. In reality, these footprints consisted of 20 fossilized footprints of a 10-year-old modern human and 27 footprints of an even younger one. They were certainly modern people like us.

This situation put the Laetoli footprints at the center of discussions for years. Evolutionary paleoanthropologists desperately tried to come up with an explanation, as it was hard for them to accept the fact that a modern man had been walking on the earth 3.6 million years ago. During the 1990s, the following "explanation" started to take shape: The evolutionists decided that these footprints must have been left by an *Australopithecus*, because according to their theory, it was impossible for a *Homo species* to have existed 3.6 years ago. However, Russell H. Tuttle wrote the following in an article in 1990:

In sum, the 3.5-million-year-old footprint traits at Laetoli site G resemble those of habitually unshod modern humans. None of their features suggest that the Laetoli hominids were less capable bipeds than we are. **If the G footprints were not known to be so old, we would readily conclude that there had been made by a member of our genus, *Homo*...** In any case, we should shelve the loose assumption that the Laetoli footprints were made by Lucy's kind, *Australopithecus afarensis*.<sup>223</sup>

To put it briefly, these footprints that were supposed to be 3.6 million years old could not have belonged to *Australopithecus*. The only reason why the footprints were thought to have been left by members of *Australopithecus* was the 3.6-million-year-old volcanic layer in which the footprints were found. The prints were ascribed to *Australopithecus* purely on the assumption that humans could not have lived so long ago.

These interpretations of the Laetoli footprints demonstrate one important fact. Evolutionists support their theory not based on scientific findings, but in spite of them. Here we have a theory that is blindly defended no matter what, with all new findings that cast the theory into doubt being either ignored or distorted to support the theory.

Briefly, the theory of evolution is not science, but a dogma kept alive despite science.

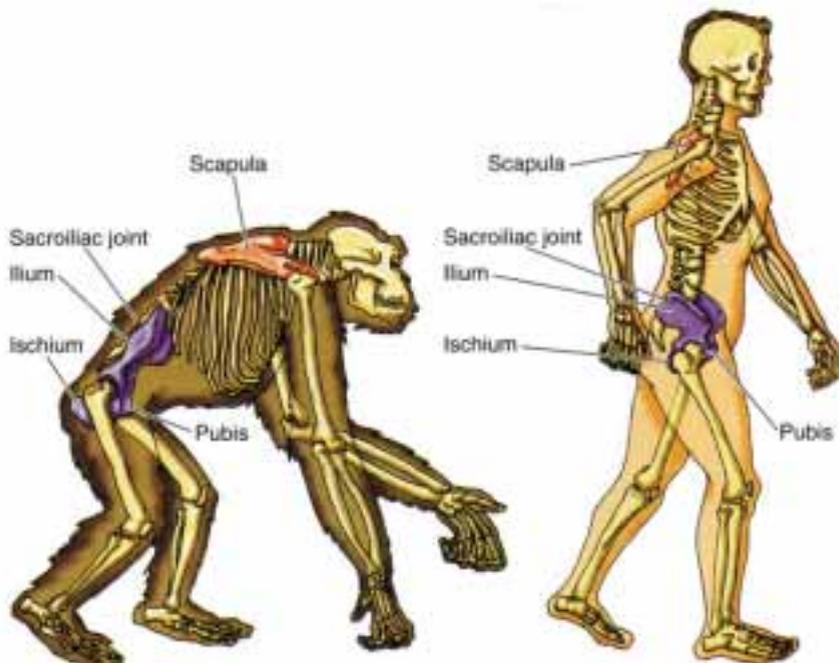
## The Bipedalism Problem

Apart from the fossil record that we have dealt with so far, unbridgeable anatomical gaps between men and apes also invalidate the fiction of human evolution. One of these has to do with the manner of walking.

Human beings walk upright on two feet. This is a very special form of locomotion not seen in any other mammalian species. Some other animals do have a limited ability to move when they stand on their two hind feet. Animals like bears and monkeys can move in this way only rarely, such as when they want to reach a source of food, and even then only for a short time. Normally, their skeletons lean forward and they walk on all fours.

Well, then, has bipedalism evolved from the quadrupedal gait of apes, as evolutionists claim?

Of course not. **Research has shown that the evolution of bipedalism**



The human skeleton is designed to walk upright. Ape skeletons, however, with their forward-leaning stance, short legs, and long arms, are suited to walking on four legs. It is not possible for there to be an "intermediate form" between them, because this would be extremely unproductive.

**never occurred, nor is it possible for it to have done so.** First of all, bipedalism is not an evolutionary advantage. The way in which apes move is much easier, faster, and more efficient than man's bipedal stride. Man can neither move by jumping from tree to tree without descending to the ground, like a chimpanzee, nor run at a speed of 125 km per hour, like a cheetah. On the contrary, since man walks on two feet, he moves much more slowly on the ground. For the same reason, he is one of the most unprotected of all species in nature in terms of movement and defence. According to the logic of evolution, apes should not have evolved to adopt a bipedal stride; humans should instead have evolved to become quadrupedal.



**Apes' hands and feet are curled in a manner suited to living in trees.**

Another impasse of the evolutionary claim is that bipedalism does not serve the "gradual development" model of Darwinism. This model, which constitutes the basis of evolution, requires that there should be a "compound" stride between bipedalism and quadrupedalism. However, with the computerized research he conducted in 1996, Robin Crompton, senior lecturer in anatomy at Liverpool University, showed that such a "compound" stride was not possible. Crompton reached the following conclusion: **A living being can either walk upright, or on all fours.**<sup>224</sup> A type of stride between the two is impossible because it would involve excessive energy consumption. This is why a half-bipedal being cannot exist.

The immense gap between man and ape is not limited solely to bipedalism. Many other issues still remain unexplained, such as brain capacity, the ability to talk, and so on. Elaine Morgan, an evolutionary paleoanthropologist, makes the following confession in relation to this matter:

Four of the most outstanding mysteries about humans are: 1) why do they walk on two legs? 2) why have they lost their fur? 3) why have they developed such large brains? 4) why did they learn to speak?

The orthodox answers to these questions are: 1) 'We do not yet know;' 2) 'We do not yet know;' 3) 'We do not yet know;' 4) 'We do not yet know.' The list of questions could be considerably lengthened without affecting the monotony of the answers.<sup>225</sup>

### **Evolution: An Unscientific Faith**

Lord Solly Zuckerman is one of the most famous and respected scientists in the United Kingdom. For years, he studied the fossil record and conducted many detailed investigations. He was elevated to the peerage for his contributions to science. Zuckerman is an evolutionist. Therefore, his comments on evolution cannot be regarded as ignorant or prejudiced. After years of research on the fossils included in the human evolution scenario however, he reached the conclusion that there is no truth to the family tree that is put forward.

Zuckerman also advanced an interesting concept of the "spectrum of the sciences," ranging from those he considered scientific to those he considered unscientific. According to Zuckerman's spectrum, the most "scientific"—that is, dependent on concrete data—fields are chemistry and physics. After them come the biological sciences and then the social sciences. At the far end of the spectrum, which is the part considered to be most "unscientific," are extra-sensory perception—concepts such as telepathy and the "sixth sense"—and finally human evolution. Zuckerman explains his reasoning as follows:

We then move right off the register of objective truth into those fields of presumed biological science, like extrasensory perception or the interpretation of man's fossil history, where **to the faithful anything is possible - and where the ardent believer is sometimes able to believe several contradictory things at the same time.**<sup>226</sup>

Robert Locke, the editor of *Discovering Archeology*, an important publication on the origins of man, writes in that journal, "The search for human ancestors gives more heat than light," quoting the confession of the famous evolutionary paleoanthropologist Tim White:

We're all frustrated by "all the questions we haven't been able to answer."<sup>227</sup>

Locke's article reviews the impasse of the theory of evolution on the origins of man and the groundlessness of the propaganda spread

about this subject:

Perhaps no area of science is more contentious than the search for human origins. Elite paleontologists disagree over even the most basic outlines of the human family tree. New branches grow amid great fanfare, only to wither and die in the face of new fossil finds.<sup>228</sup>

The same fact was also recently accepted by Henry Gee, the editor of the well-known journal *Nature*. In his book *In Search of Deep Time*, published in 1999, Gee points out that all the evidence for human evolution "between about 10 and 5 million years ago-several thousand generations of living creatures-can be fitted into a small box." He concludes that conventional theories of the origin and development of human beings are "a completely human invention created after the fact, shaped to accord with human prejudices," and adds:

To take a line of fossils and claim that they represent a lineage is not a scientific hypothesis that can be tested, but an assertion that carries the same validity as a bedtime story-amusing, perhaps even instructive, but not scientific.<sup>229</sup>

As we have seen, there is no scientific discovery supporting or propping up the theory of evolution, just some scientists who blindly believe in it. These scientists both believe in the myth of evolution themselves, although it has no scientific foundation, and also make other people believe it by using the media, which cooperate with them. In the pages that follow, we shall examine a few examples of this deceptive propaganda carried out in the name of evolution.

## **Deceptive Reconstructions**

Even if evolutionists are unsuccessful in finding scientific evidence to support their theories, they are very successful at one thing: propaganda. The most important element of this propaganda is the practice of creating false designs known as "reconstructions."

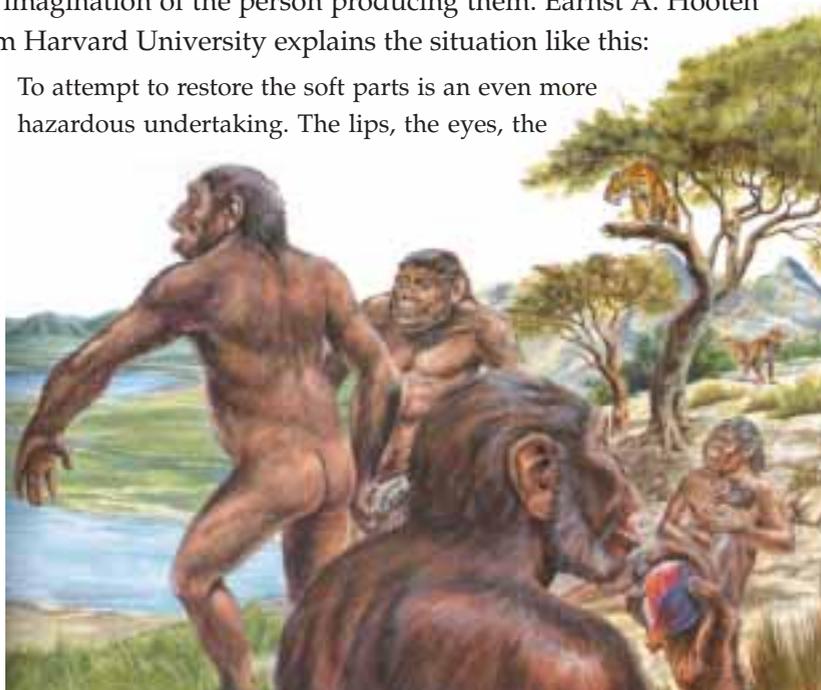
Reconstruction can be explained as drawing a picture or constructing a model of a living thing based on a single bone—sometimes only a fragment—that has been unearthed. The "ape-men" we see in newspapers, magazines, and films are all reconstructions.

Since fossils are usually fragmented and incomplete, any conjecture

based on them is likely to be completely speculative. As a matter of fact, the reconstructions (drawings or models) made by evolutionists based on fossil remains are prepared speculatively precisely to validate the evolutionary thesis. David R. Pilbeam, an eminent anthropologist from Harvard, stresses this fact when he says: "At least in paleoanthropology, data are still so sparse that **theory heavily influences interpretations**. Theories have, in the past, clearly reflected our current ideologies instead of the actual data."<sup>230</sup> Since people are highly affected by visual information, these reconstructions best serve the purpose of evolutionists, which is to convince people that these reconstructed creatures really existed in the past.

At this point, we have to highlight one particular point: Reconstructions based on bone remains can only reveal the most general characteristics of the creature, since the really distinctive morphological features of any animal are soft tissues which quickly vanish after death. Therefore, due to the speculative nature of the interpretation of the soft tissues, the reconstructed drawings or models become totally dependent on the imagination of the person producing them. Earnst A. Hooten from Harvard University explains the situation like this:

To attempt to restore the soft parts is an even more hazardous undertaking. The lips, the eyes, the



Reconstruction drawings reflect only evolutionists' imaginations, not scientific discoveries.

ears, and the nasal tip leave no clues on the underlying bony parts. **You can with equal facility model on a Neanderthaloid skull the features of a chimpanzee or the lineaments of a philosopher.** These alleged restorations of ancient types of man have very little if any scientific value and are likely only **to mislead the public ...** So put not your trust in reconstructions.<sup>231</sup>

As a matter of fact, evolutionists invent such preposterous stories that they even ascribe different faces to the same skull. For example, the three different reconstructed drawings made for the fossil named *Australopithecus robustus* (Zinjanthropus) are a famous example of such forgery.

The biased interpretation of fossils and outright fabrication of many imaginary reconstructions are an indication of how frequently evolutionists have recourse to tricks. Yet these seem innocent when compared to the deliberate forgeries that have been perpetrated in the history of evolution.

There is no concrete fossil evidence to support the "ape-man" image, which is unceasingly promulgated by the media and evolutionist academic circles. With brushes in their hands, evolutionists produce imaginary creatures; nevertheless, the fact that these drawings correspond to no matching fossils constitutes a serious problem for them. One of the interesting methods they employ to overcome this problem is to "produce" the fossils they cannot find. Piltdown man, which may be the biggest scandal in the history of science, is a typical example of this method.

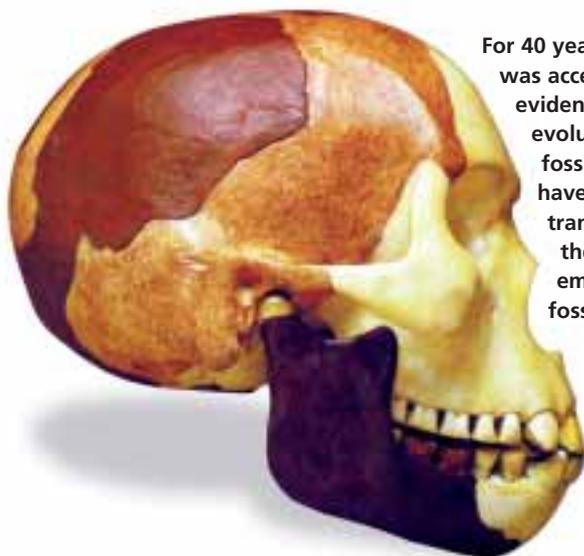
### **The Piltdown Man Scandal**

In 1912, a well-known doctor and amateur paleoanthropologist named Charles Dawson came out with the assertion that he had found a jawbone and a cranial fragment in a pit in Piltdown, England. Even though the jawbone was more ape-like, the teeth and the skull were like a man's. These specimens were labelled the "Piltdown man." Alleged to be 500,000 years old, they were displayed as an absolute proof of human evolution in several museums. For more than 40 years, many scientific articles were written on "Piltdown man," many interpretations and drawings were made, and the fossil was presented as important evidence for human evolution. No fewer than 500 doctoral theses were written on the subject.<sup>232</sup> While visiting the British Museum in 1921, leading American

paleontologist Henry Fairfield Osborn said "We have to be reminded over and over again that Nature is full of paradoxes" and proclaimed Piltdown "a discovery of transcendent importance to the prehistory of man."<sup>233</sup>

In 1949, Kenneth Oakley, from the British Museum's Paleontology Department, attempted to use "fluorine testing," a new test used for determining the date of fossils. A trial was made on the fossil of Piltdown man. The result was astonishing. During the test, it was realized that the jawbone of Piltdown man did not contain any fluorine. This indicated that it had remained buried no more than a few years. The skull, which contained only a small amount of fluorine, showed that it was only a few thousand years old.

It was determined that the teeth in the jawbone, belonging to an orangutan, had been worn down artificially and that the "primitive" tools discovered with the fossils were simple imitations that had been sharpened with steel implements. In the detailed analysis completed by Joseph Weiner, this forgery was revealed to the public in 1953. **The skull belonged to a 500-year-old man, and the jaw bone belonged to a recently deceased ape!** The teeth had been specially arranged in a particular way and added to the jaw, and the molar surfaces were filed in order to resemble those of a man. Then all these pieces were stained with



For 40 years, Piltdown man was accepted as the greatest evidence for human evolution. Evolutionist fossil experts claimed to have found a lot of transitional features in the skull. It only emerged later that the fossil was a fake.

potassium dichromate to give them an old appearance. These stains began to disappear when dipped in acid. Sir Wilfred Le Gros Clark, who was in the team that uncovered the forgery, could not hide his astonishment at this situation, and said: "**The evidences of artificial abrasion immediately sprang to the eye. Indeed so obvious** did they seem it may well be asked—how was it that they had escaped notice before?"<sup>234</sup> In the wake of all this, "Piltdown man" was hurriedly removed from the British Museum where it had been displayed for more than 40 years.

### **The Nebraska Man Scandal**

In 1922, Henry Fairfield Osborn, the director of the American Museum of Natural History, declared that he had found a fossil molar tooth belonging to the Pliocene period in western Nebraska near Snake Brook. This tooth allegedly bore common characteristics of both man and ape. An extensive scientific debate began surrounding this fossil, which came to be called "Nebraska man," in which some interpreted this tooth as belonging to *Pithecanthropus erectus*, while others claimed it was closer to human beings. Nebraska man was also immediately given a "scientific name," *Hesperopithecus haroldcooki*.

Many authorities gave Osborn their support. Based on this single tooth, reconstructions of Nebraska man's head and body were drawn. Moreover, Nebraska man was even pictured along with his wife and children, as a whole family in a natural setting.

All of these scenarios were developed from just one tooth. Evolutionist circles placed such faith in this "ghost man" that when a researcher named William Bryan opposed these biased conclusions relying on a single tooth, he was harshly criticized.

In 1927, other parts of the skeleton were also found. According to these newly discovered pieces, the tooth belonged neither to a man nor to an ape. It was realized that it belonged to an extinct species of wild American pig called *Prosthennops*. William Gregory entitled the article published in *Science* in which he announced the truth, "*Hesperopithecus* Apparently Not an Ape Nor a Man."<sup>235</sup> Then all the drawings of *Hesperopithecus haroldcooki* and his "family" were hurriedly removed from evolutionary literature.



Nebraska man, and  
Henry Fairfield Osborn,  
who named it.



## Conclusion

All the scientific deceptions and prejudiced evaluations made to support the theory of evolution show that the theory is a kind of ideology, and not at all a scientific account. Like all ideologies, this one too has its fanatical supporters, who are desperate to prove evolution, at no matter what cost. Or else they are so dogmatically bound to the theory that every new discovery is perceived as a great proof of the theory, even if it has nothing to do with evolution. This is really a very distressing picture for science, because it shows that science is being misdirected in the name of a dogma.

In his book *Darwinism: The Refutation of a Myth*, the Swedish scientist Soren Lovtrup has this to say on the subject:

I suppose that nobody will deny that it is a great misfortune if an entire branch of science becomes addicted to a false theory. But this is what has happened in biology: for a long time now people discuss evolutionary problems in a peculiar "Darwinian" vocabulary—"adaptation," "selection pressure," "natural selection," etc.—thereby believing that they contribute to the explanation of natural events. They do not... I believe that one day the Darwinian myth will be ranked the greatest deceit in the history of science.<sup>236</sup>

Further proof that Darwinism is the greatest deception in the history of science is provided by molecular biology.

# MOLECULAR BIOLOGY AND THE ORIGIN OF LIFE

In previous sections of this book, we have shown how the fossil record invalidates the theory of evolution. In point of fact, there was no need for us to relate any of that, because the theory of evolution collapses long before one gets to any claims about the evidence of fossils. The subject that renders the theory meaningless from the very outset is the question of how life first appeared on earth.

When it addresses this question, evolutionary theory claims that life started with a cell that formed by chance. According to this scenario, four billion years ago various chemical compounds underwent a reaction in the primordial atmosphere on the earth in which the effects of thunderbolts and atmospheric pressure led to the formation of the first living cell.

The first thing that must be said is that the claim that nonliving materials can come together to form life is an unscientific one that has not been verified by any experiment or observation. Life is only generated from life. Each living cell is formed by the replication of another cell. No one in the world has ever succeeded in forming a living cell by bringing inanimate materials together, not even in the most advanced laboratories.

The theory of evolution claims that a living cell—which cannot be produced even when all the power of the human intellect, knowledge and technology are brought to bear—nevertheless managed to form by chance under primordial conditions on the earth. In the following pages, we will examine why this claim is contrary to the most basic principles of science and reason.

### **An Example of the Logic of "Chance"**

If one believes that a living cell can come into existence by chance, then there is nothing to prevent one from believing a similar story that we will relate below. It is the story of a town.

One day, a lump of clay, pressed between the rocks in a barren land, becomes wet after it rains. The wet clay dries and hardens when the sun rises, and takes on a stiff, resistant form. Afterwards, these rocks, which also served as a mould, are somehow smashed into pieces, and then a neat, well shaped, and strong brick appears. This brick waits under the same natural conditions for years for a similar brick to be formed. This goes on until hundreds and thousands of the same bricks have been formed in the same place. However, by chance, none of the bricks that were previously formed are damaged. Although exposed to storms, rain, wind, scorching sun, and freezing cold for thousands of years, the bricks do not crack, break up, or get dragged away, but wait there in the same place with the same determination for other bricks to form.

When the number of bricks is adequate, they erect a building by being arranged sideways and on top of each other, having been randomly dragged along by the effects of natural conditions such as winds, storms, or tornadoes. Meanwhile, materials such as cement or soil mixtures form under "natural conditions," with perfect timing, and creep between the bricks to clamp them to each other. While all this is happening, iron ore under the ground is shaped under "natural conditions" and lays the foundations of a building that is to be formed with these bricks. At the end of this process, a complete building rises with all its materials, carpentry, and installations intact.

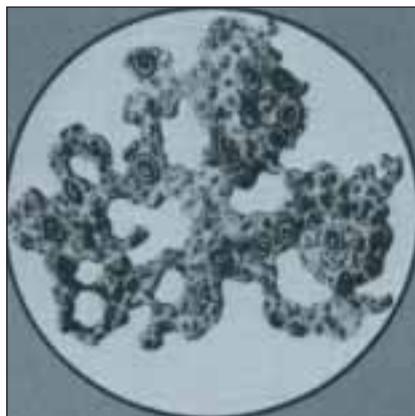
Of course, a building does not only consist of foundations, bricks, and cement. How, then, are the other missing materials to be obtained? The answer is simple: all kinds of materials that are needed for the construction of the building exist in the earth on which it is erected. Silicon for the glass, copper for the electric cables, iron for the columns, beams, water pipes, etc. all exist under the ground in abundant quantities. It takes only the skill of "natural conditions" to shape and place these materials inside the building. All the installations, carpentry, and accessories are placed among the bricks with the help of the blowing wind, rain, and

earthquakes. Everything has gone so well that the bricks are arranged so as to leave the necessary window spaces as if they knew that something called glass would be formed later on by natural conditions. Moreover, they have not forgotten to leave some space to allow the installation of water, electricity and heating systems, which are also later to be formed by chance. Everything has gone so well that "coincidences" and "natural conditions" produce a perfect design.

If you have managed to sustain your belief in this story so far, then you should have no trouble surmising how the town's other buildings, plants, highways, sidewalks, substructures, communications, and transportation systems came about. If you possess technical knowledge and are fairly conversant with the subject, you can even write an extremely "scientific" book of a few volumes stating your theories about "the evolutionary process of a sewage system and its uniformity with the present structures." You may well be honored with academic awards for your clever studies, and may consider yourself a genius, shedding light on the nature of humanity.

The theory of evolution, which claims that life came into existence by chance, is no less absurd than our story, for, with all its operational systems, and systems of communication, transportation and management, a cell is no less complex than a city. In his book *Evolution: A Theory in Crisis*, the molecular biologist Michael Denton discusses the complex structure of the cell:

To grasp the reality of life as it has been revealed by molecular biology, we must magnify a cell a thousand million times until it is twenty kilometers in diameter and resembles a giant airship large enough to cover a great city like London or New York. What we would then see would be an object of unparalleled complexity and adaptive design. On the surface of the cell we would see millions of openings, like the port holes of a vast space ship, opening and closing to allow a continual stream of materials to flow in and out. If we were to enter one of these openings we would find ourselves in a world of supreme technology and bewildering complexity... Is it really credible that random processes could have constructed a reality, the smallest element of which—a functional protein or gene—is complex **beyond our own creative capacities, a reality which is the very antithesis of chance**, which excels in every sense anything produced by the intelligence of man?<sup>237</sup>



In Darwin's time, it was thought that the cell had a very simple structure. Darwin's ardent supporter Ernst Haeckel suggested that the above mud pulled up from the bottom of the sea could produce life by itself.

### **The Complex Structure and Systems in the Cell**

The complex structure of the living cell was unknown in Darwin's day and at the time, ascribing life to "coincidences and natural conditions" was thought by evolutionists to be convincing enough. Darwin had proposed that the first cell could easily have formed "in some warm little pond."<sup>238</sup> One of Darwin's supporters, the German biologist Ernst Haeckel, examined under the microscope a mixture of mud removed from the sea bed by a research ship and claimed that this was a nonliving substance that turned into a living one. This so-called "mud that comes to life," known as *Bathybius haeckelii* ("Haeckel's mud from the depths"), is an indication of just how simple a thing life was thought to be by the founders of the theory of evolution.

The technology of the twentieth century has delved into the tiniest particles of life, and has revealed that the cell is the most complex system mankind has ever confronted. Today we know that the cell contains power stations producing the energy to be used by the cell, factories manufacturing the enzymes and hormones essential for life, a databank where all the necessary information about all products to be produced is

recorded, complex transportation systems and pipelines for carrying raw materials and products from one place to another, advanced laboratories and refineries for breaking down external raw materials into their useable parts, and specialized cell membrane proteins to control the incoming and outgoing materials. And these constitute only a small part of this incredibly complex system.

W. H. Thorpe, an evolutionist scientist, acknowledges that "The most elementary type of cell constitutes a 'mechanism' unimaginably more complex than any machine yet thought up, let alone constructed, by man."<sup>239</sup>

A cell is so complex that even the high level of technology attained today cannot produce one. No effort to create an artificial cell has ever met with success. Indeed, all attempts to do so have been abandoned.

The theory of evolution claims that this system—which mankind, with all the intelligence, knowledge and technology at its disposal, cannot succeed in reproducing—came into existence "by chance" under the conditions of the primordial earth. Actually, the probability of forming a cell by chance is about the same as that of producing a perfect copy of a book following an explosion in a printing house.

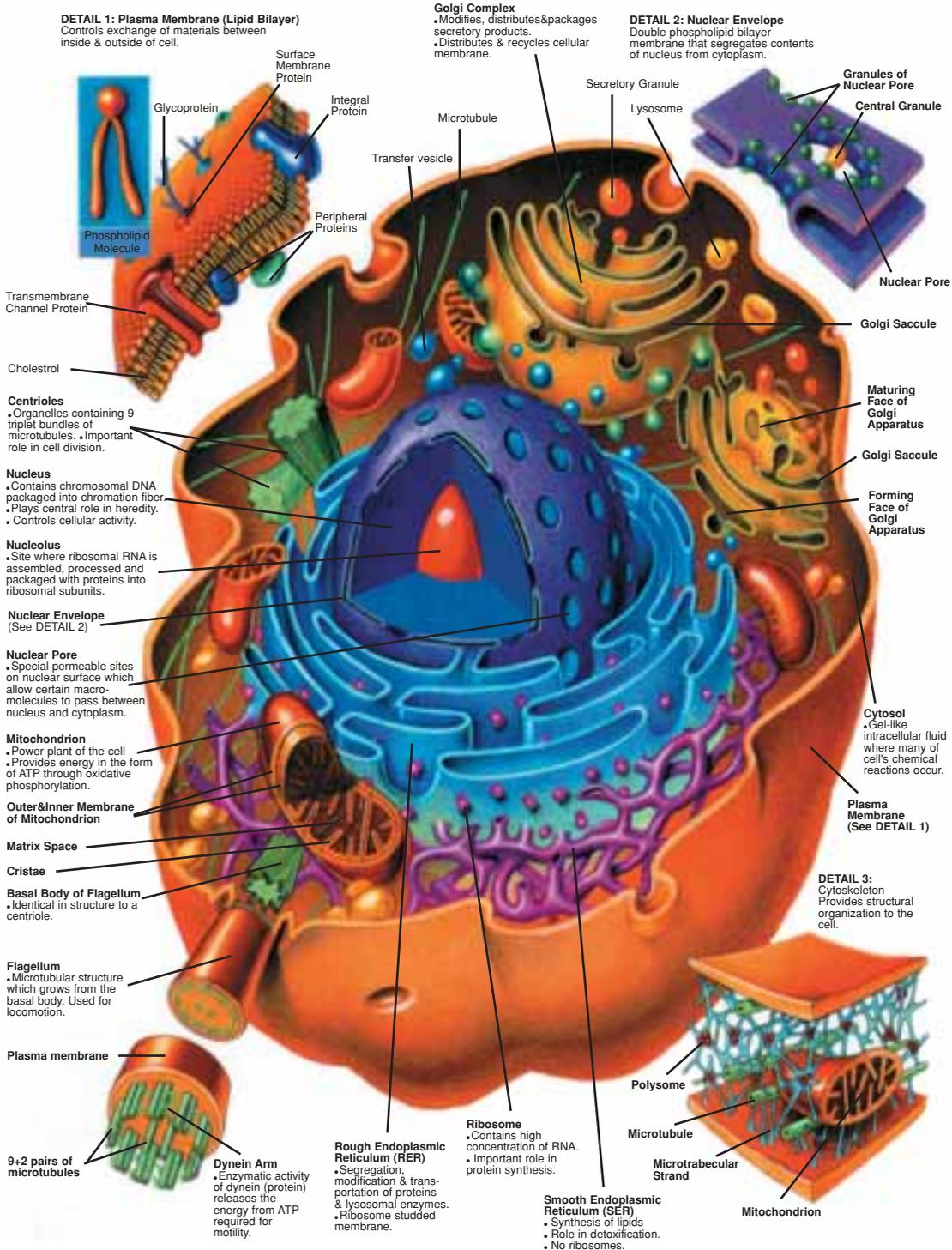
The English mathematician and astronomer Sir Fred Hoyle made a similar comparison in an interview published in *Nature* magazine on November 12, 1981. Although an evolutionist himself, Hoyle stated that the chance that higher life forms might have emerged in this way is comparable to the chance that a tornado sweeping through a **junk-yard might assemble a Boeing 747 from the materials therein.**<sup>240</sup> This means that it is not possible for the cell to have come into being by chance, and therefore it must definitely have been "created."



Fred Hoyle

One of the basic reasons why the theory of evolution cannot explain how the cell came into existence is the "**irreducible complexity**" in it. A living cell maintains itself with the harmonious co-operation of many organelles. If only one of these organelles fails to function, the cell cannot

# DARWINISM REFUTED



remain alive. The cell does not have the chance to wait for unconscious mechanisms like natural selection or mutation to permit it to develop. Thus, the first cell on earth was necessarily a complete cell possessing all the required organelles and functions, and this definitely means that this cell had to have been created.

### **The Problem of the Origin of Proteins**

So much for the cell, but evolution fails even to account for the building-blocks of a cell. The formation, under natural conditions, of just one single protein out of the thousands of complex protein molecules making up the cell is impossible.

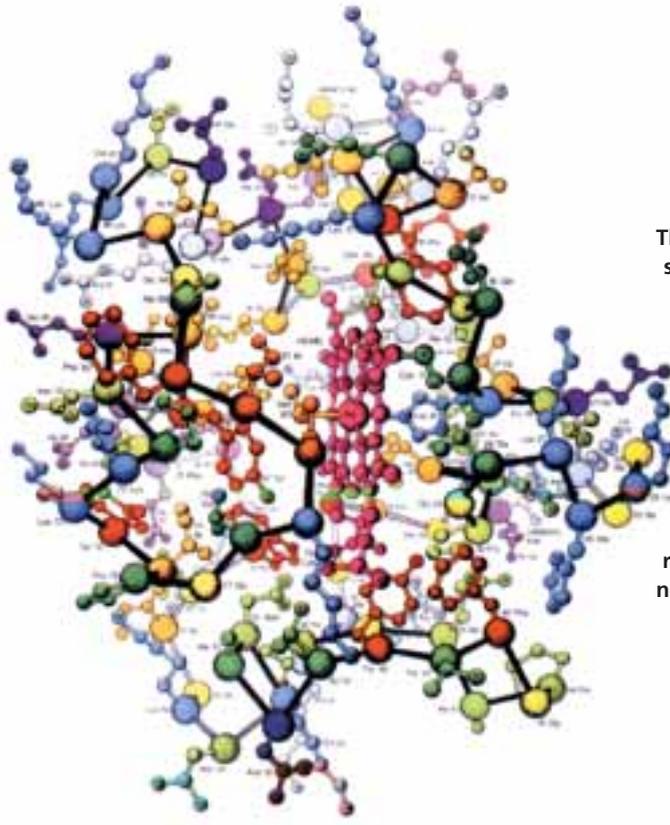
Proteins are giant molecules consisting of smaller units called amino acids that are arranged in a particular sequence in certain quantities and structures. These units constitute the building blocks of a living protein. The simplest protein is composed of 50 amino acids, but there are some that contain thousands.

The crucial point is this. The absence, addition, or replacement of a single amino acid in the structure of a protein causes the protein to become a useless molecular heap. Every amino acid has to be in the right place and in the right order. The theory of evolution, which claims that life emerged as a result of chance, is quite helpless in the face of this order, since it is too wondrous to be explained by coincidence. (Furthermore, the theory cannot even substantiate the claim of the accidental formation of amino acids, as will be discussed later.)

The fact that it is quite impossible for the functional structure of proteins to come about by chance can easily be observed even by simple probability calculations that anybody can understand.

For instance, an average-sized protein molecule composed of 288 amino acids, and contains twelve different types of amino acids can be arranged in  $10^{300}$  different ways. (This is an astronomically huge number, consisting of 1 followed by 300 zeros.) Of all of these possible sequences, only one forms the desired protein molecule. The rest of them are amino-acid chains that are either totally useless, or else potentially harmful to living things.

In other words, the probability of the formation of only one protein



The complex 3-D structure of the protein cytochrome-C. The slightest difference in the order of the amino acids, represented by little balls, will render the protein nonfunctional.

molecule is "1 in  $10^{300}$ ." The probability of this "1" actually occurring is practically nil. (In practice, probabilities smaller than 1 over  $10^{50}$  are thought of as "zero probability").

Furthermore, a protein molecule of 288 amino acids is a rather modest one compared with some giant protein molecules consisting of thousands of amino acids. When we apply similar probability calculations to these giant protein molecules, we see that even the word "impossible" is insufficient to describe the true situation.

When we proceed one step further in the evolutionary scheme of life, we observe that one single protein means nothing by itself. One of the smallest bacteria ever discovered, *Mycoplasma hominis* H39, contains 600 types of proteins. In this case, we would have to repeat the probability calculations we have made above for one protein for each of these 600 different types of proteins. The result beggars even the concept of impossibility.

Some people reading these lines who have so far accepted the theory of evolution as a scientific explanation may suspect that these numbers are

exaggerated and do not reflect the true facts. That is not the case: these are definite and concrete facts. No evolutionist can object to these numbers.

This situation is in fact acknowledged by many evolutionists. For example, Harold F. Blum, a prominent evolutionist scientist, states that **"The spontaneous formation of a polypeptide of the size of the smallest known proteins seems beyond all probability."**<sup>241</sup>

Evolutionists claim that molecular evolution took place over a very long period of time and that this made the impossible possible. Nevertheless, no matter how long the given period may be, it is not possible for amino acids to form proteins by chance. William Stokes, an American geologist, admits this fact in his book *Essentials of Earth History*, writing that the probability is so small "that it would not occur during billions of years on billions of planets, each covered by a blanket of concentrated watery solution of the necessary amino acids."<sup>242</sup>

So what does all this mean? Perry Reeves, a professor of chemistry, answers the question:

When one examines the vast number of possible structures that could result from a simple random combination of amino acids in an evaporating primordial pond, **it is mind-boggling to believe that life could have originated in this way.** It is more plausible that a Great Builder with a master plan would be required for such a task.<sup>243</sup>

If the coincidental formation of even one of these proteins is impossible, it is billions of times "more impossible" for some one million of those proteins to come together by chance and make up a complete human cell. What is more, by no means does a cell consist of a mere heap of proteins. In addition to the proteins, a cell also includes nucleic acids, carbohydrates, lipids, vitamins, and many other chemicals such as electrolytes arranged in a specific proportion, equilibrium, and design in terms of both structure and function. Each of these elements functions as a building block or co-molecule in various organelles.

Robert Shapiro, a professor of chemistry at New York University and a DNA expert, calculated the probability of the coincidental formation of the 2000 types of proteins found in a single bacterium (There are 200,000 different types of proteins in a human cell.) The number that was found was 1 over  $10^{40000}$ .<sup>244</sup> (This is an incredible number obtained by putting 40,000 zeros after the 1)

A professor of applied mathematics and astronomy from University College Cardiff, Wales, Chandra Wickramasinghe, comments:

The likelihood of the spontaneous formation of life from inanimate matter is one to a number with 40,000 noughts after it... It is big enough to bury Darwin and the whole theory of evolution. There was no primeval soup, neither on this planet nor on any other, and if the beginnings of life were not random, they must therefore have been **the product of purposeful intelligence**.<sup>245</sup>

Sir Fred Hoyle comments on these implausible numbers:

Indeed, **such a theory (that life was assembled by an intelligence) is so obvious** that one wonders why it is not widely accepted as being self-evident. The reasons are psychological rather than scientific.<sup>246</sup>

An article published in the January 1999 issue of *Science News* revealed that no explanation had yet been found for how amino acids could turn into proteins:

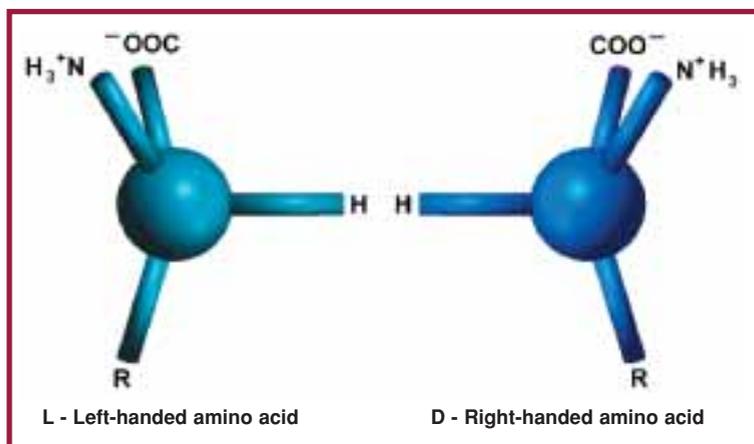
....no one has ever satisfactorily explained how the widely distributed ingredients linked up into proteins. Presumed conditions of primordial Earth would have driven the amino acids toward lonely isolation.<sup>247</sup>

### **Left-handed Proteins**

Let us now examine in detail why the evolutionist scenario regarding the formation of proteins is impossible.

Even the correct sequence of the right amino acids is still not enough for the formation of a functional protein molecule. In addition to these requirements, each of the 20 different types of amino acids present in the composition of proteins must be left-handed. There are two different types of amino acids—as of all organic molecules—called "left-handed" and "right-handed." The difference between them is the mirror-symmetry between their three dimensional structures, which is similar to that of a person's right and left hands.

Amino acids of either of these two types can easily bond with one another. But one astonishing fact that has been revealed by research is that all the proteins in plants and animals on this planet, from the simplest organism to the most complex, are made up of left-handed amino acids. If even a single right-handed amino acid gets attached to the structure of a



The same protein's left- (L) and right- (D) handed isomers. The proteins in living creatures consist only of left-handed amino acids.

protein, the protein is rendered useless. In a series of experiments, surprisingly, bacteria that were exposed to right-handed amino acids immediately destroyed them. In some cases, they produced usable left-handed amino acids from the fractured components.

Let us for an instant suppose that life came about by chance as evolutionists claim it did. In this case, the right- and left-handed amino acids that were generated by chance should be present in roughly equal proportions in nature. Therefore, all living things should have both right- and left-handed amino acids in their constitution, because chemically it is possible for amino acids of both types to combine with each other. However, as we know, in the real world the proteins existing in all living organisms are made up only of left-handed amino acids.

The question of how proteins can pick out only the left-handed ones from among all amino acids, and how not even a single right-handed amino acid gets involved in the life process, is a problem that still baffles evolutionists. Such a specific and conscious selection constitutes one of the greatest impasses facing the theory of evolution.

Moreover, this characteristic of proteins makes the problem facing evolutionists with respect to "chance" even worse. In order for a "meaningful" protein to be generated, it is not enough for the amino acids to be present in a particular number and sequence, and to be combined together in the right three-dimensional design. Additionally, all these

amino acids have to be left-handed: not even one of them can be right-handed. Yet there is no natural selection mechanism which can identify that a right-handed amino acid has been added to the sequence and recognize that it must therefore be removed from the chain. This situation once more eliminates for good the possibility of coincidence and chance.

*The Britannica Science Encyclopaedia*, which is an outspoken defender of evolution, states that the amino acids of all living organisms on earth, and the building blocks of complex polymers such as proteins, have the same left-handed asymmetry. It adds that this is tantamount to tossing a coin a million times and always getting heads. The same encyclopaedia states that it is impossible to understand why molecules become left-handed or right-handed, and that this choice is fascinatingly related to the origin of life on earth.<sup>248</sup>

If a coin always turns up heads when tossed a million times, is it more logical to attribute that to chance, or else to accept that there is conscious intervention going on? The answer should be obvious. However, obvious though it may be, evolutionists still take refuge in coincidence, simply because they do not want to accept the existence of conscious intervention.

A situation similar to the left-handedness of amino acids also exists with respect to nucleotides, the smallest units of the nucleic acids, DNA and RNA. In contrast to proteins, in which only left-handed amino acids are chosen, in the case of the nucleic acids, the preferred forms of their nucleotide components are always right-handed. This is another fact that can never be explained by chance.

In conclusion, it is proven beyond a shadow of a doubt by the probabilities we have examined that the origin of life cannot be explained by chance. If we attempt to calculate the probability of an average-sized protein consisting of 400 amino acids being selected only from left-handed amino acids, we come up with a probability of 1 in  $2^{400}$ , or  $10^{120}$ . Just for a comparison, let us remember that the number of electrons in the universe is estimated at  $10^{79}$ , which although vast, is a much smaller number. The probability of these amino acids forming the required sequence and functional form would generate much larger numbers. If we add these probabilities to each other, and if we go on to work out the probabilities of even higher numbers and types of proteins, the calculations become inconceivable.

## **The Indispensability of the Peptide Link**

The difficulties the theory of evolution is unable to overcome with regard to the development of a single protein are not limited to those we have recounted so far. It is not enough for amino acids to be arranged in the correct numbers, sequences, and required three-dimensional structures. The formation of a protein also requires that amino acid molecules with more than one arm be linked to each other only in certain ways. Such a bond is called a "**peptide bond**." Amino acids can make different bonds with each other; but proteins are made up of those—and only those—amino acids which are joined by peptide bonds.

A comparison will clarify this point. Suppose that all the parts of a car were complete and correctly assembled, with the sole exception that one of the wheels was fastened in place not with the usual nuts and bolts, but with a piece of wire, in such a way that its hub faced the ground. It would be impossible for such a car to move even the shortest distance, no matter how complex its technology or how powerful its engine. At first glance, everything would seem to be in the right place, but the faulty attachment of even one wheel would make the entire car useless. In the same way, in a protein molecule the joining of even one amino acid to another with a bond other than a peptide bond would make the entire molecule useless.

Research has shown that amino acids combining at random combine with a peptide bond only 50 percent of the time, and that the rest of the time different bonds that are not present in proteins emerge. To function properly, each amino acid making up a protein must be joined to others only with a peptide bond, in the same way that it likewise must be chosen only from among left-handed forms.

The probability of this happening is the same as the probability of each protein's being left-handed. That is, when we consider a protein made up of 400 amino acids, the probability of all amino acids combining among themselves with only peptide bonds is 1 in  $2^{399}$ .

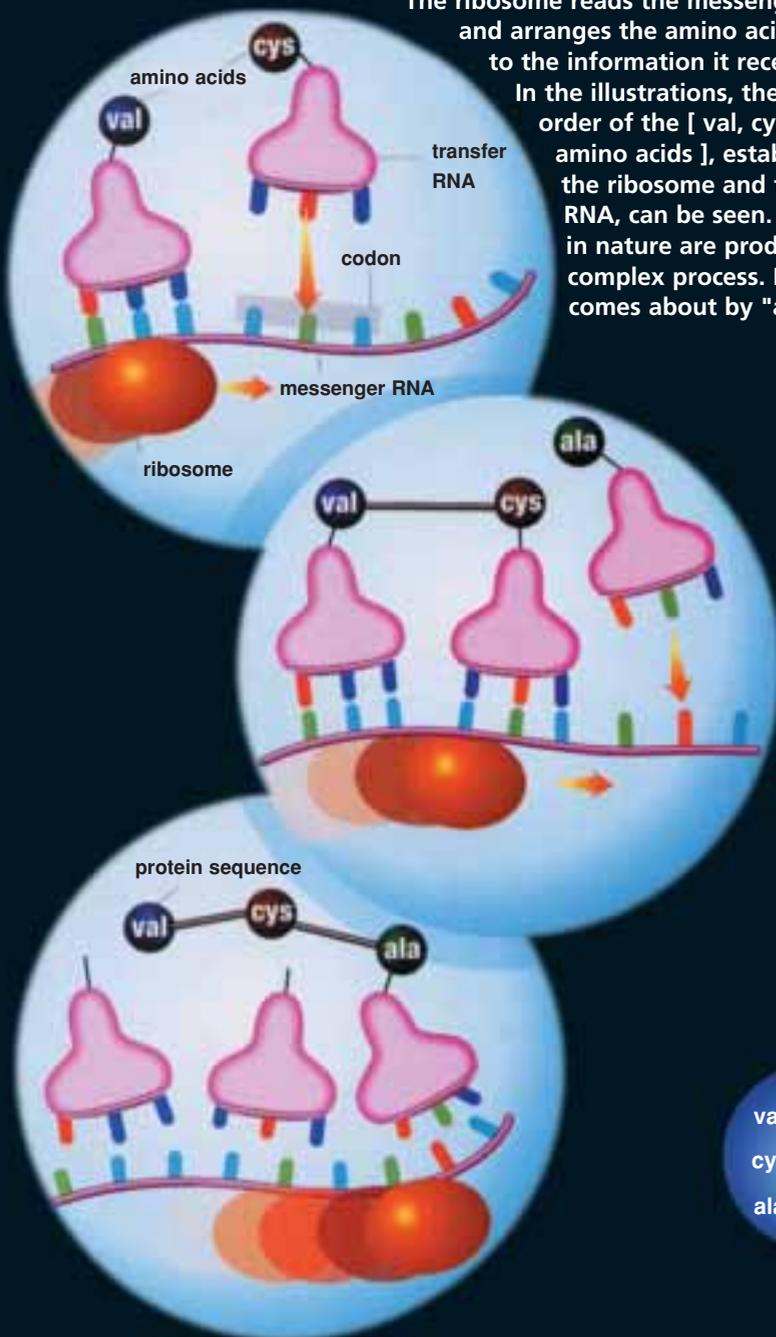
## **Zero Probability**

If we add together the three probabilities (that of amino acids being laid out correctly, that of their all being left-handed, and that of their all being joined by peptide links), then we come face to face with the

## PROTEIN SYNTHESIS:

The ribosome reads the messenger RNA, and arranges the amino acids according to the information it receives there.

In the illustrations, the consecutive order of the [ val, cys, and ala amino acids ], established by the ribosome and transfer RNA, can be seen. All proteins in nature are produced by this complex process. No protein comes about by "accident."



val valine  
cys cysteine  
ala alanine

astronomical figure of **1 in  $10^{950}$** . This is a probability only on paper. Practically speaking, there is zero chance of its actually happening. As we saw earlier, in mathematics, a probability smaller than 1 in  $10^{50}$  is statistically considered to have a "zero" probability of occurring.

Even if we suppose that amino acids have combined and decomposed by a "trial and error" method, without losing any time since the formation of the earth, in order to form a single protein molecule, the time that would be required for something with a probability of  $10^{950}$  to happen would still hugely exceed the estimated age of the earth.

The conclusion to be drawn from all this is that evolution falls into a terrible abyss of improbability even when it comes to the formation of a single protein.

One of the foremost proponents of the theory of evolution, Professor Richard Dawkins, states the impossibility the theory has fallen into in these terms:

So the sort of lucky event we are looking at *could* be so wildly improbable that the chances of its happening, somewhere in the universe, could be as low as one in a billion billion billion in any one year. If it *did* happen on only one planet, anywhere in the universe, that planet has to be our planet—because here we are talking about it.<sup>249</sup>

This admission by one of evolution's foremost authorities clearly reflects the logical muddle the theory of evolution is built on. The above statements in Dawkins's book *Climbing Mount Improbable* are a striking example of circular reasoning which actually explains nothing: "If we are here, then that means that evolution happened."

As we have seen, even the most prominent of the proponents of evolution confess that the theory is buried in impossibility when it comes to accounting for the first stage of life. But how interesting it is that, rather than accept the complete unreality of the theory they maintain, they prefer to cling to evolution in a dogmatic manner! This is a completely ideological fixation.

### **Is There a Trial-and-Error Mechanism in Nature?**

Finally, we may conclude with a very important point in relation to the basic logic of probability calculations, of which we have already seen some examples. We indicated that the probability calculations made above

reach astronomical levels, and that these astronomical odds have no chance of actually happening. However, there is a much more important and damaging fact facing evolutionists here. This is that under natural conditions, no period of trial and error can even start, despite the astronomical odds, because there is no trial-and-error mechanism in nature from which proteins could emerge.

The calculations we gave above to demonstrate the probability of the formation of a protein molecule with 500 amino acids are valid only for an ideal trial-and-error environment, which does not actually exist in real life. That is, the probability of obtaining a useful protein is "1" in  $10^{950}$  only if we suppose that there exists an imaginary mechanism in which an invisible hand joins 500 amino acids at random and then, seeing that this is not the right combination, disentangles them one by one, and arranges them again in a different order, and so on. In each trial, the amino acids would have to be separated one by one, and arranged in a new order. The synthesis should be stopped after the 500th amino acid has been added, and it must be ensured that not even one extra amino acid is involved. The trial should then be stopped to see whether or not a functional protein has yet been formed, and, in the event of failure, everything should be split up again and then tested for another sequence. Additionally, in each trial, not even one extraneous substance should be allowed to become involved. It is also imperative that the chain formed during the trial should not be separated and destroyed before reaching the 499th link. These conditions mean that the probabilities we have mentioned above can only operate in a controlled environment where there is a conscious mechanism directing the beginning, the end, and each intermediate stage of the process, and where only "the selection of the amino acids" is left to chance. It is clearly impossible for such an environment to exist under natural conditions. Therefore the formation of a protein in the natural environment is logically and technically impossible.

Since some people are unable to take a broad view of these matters, but approach them from a superficial viewpoint and assume protein formation to be a simple chemical reaction, they may make unrealistic deductions such as "amino acids combine by way of reaction and then form proteins." However, accidental chemical reactions taking place in a nonliving structure can only lead to simple and primitive changes. The

number of these is predetermined and limited. For a somewhat more complex chemical material, huge factories, chemical plants, and laboratories have to be involved. Medicines and many other chemical materials that we use in our daily life are made in just this way. Proteins have much more complex structures than these chemicals produced by industry. Therefore, it is impossible for proteins, each of which is a wonder of design and engineering, in which every part takes its place in a fixed order, to originate as a result of haphazard chemical reactions.

Let us for a minute put aside all the impossibilities we have described so far, and suppose that a useful protein molecule still evolved spontaneously "by accident." Even so, evolution again has no answers, because in order for this protein to survive, it would need to be isolated from its natural habitat and be protected under very special conditions. Otherwise, it would either disintegrate from exposure to natural conditions on earth, or else join with other acids, amino acids, or chemical compounds, thereby losing its particular properties and turning into a totally different and useless substance.

What we have been discussing so far is the impossibility of just one protein's coming about by chance. However, in the human body alone there are some 100,000 proteins functioning. Furthermore, there are about 1.5 million species named, and another 10 million are believed to exist. Although many similar proteins are used in many life forms, it is estimated that there must be 100 million or more types of protein in the plant and animal worlds. And the millions of species which have already become extinct are not included in this calculation. In other words, hundreds of millions of protein codes have existed in the world. If one considers that not even one protein can be explained by chance, it is clear what the existence of hundreds of millions of different proteins must mean.

Bearing this truth in mind, it can clearly be understood that such concepts as "coincidence" and "chance" have nothing to do with the existence of living things.

### **The Evolutionary Argument about the Origin of Life**

Above all, there is one important point to take into consideration: If any one step in the evolutionary process is proven to be impossible, this is

sufficient to prove that the whole theory is totally false and invalid. For instance, by proving that the haphazard formation of proteins is impossible, all other claims regarding the subsequent steps of evolution are also refuted. After this, it becomes meaningless to take some human and ape skulls and engage in speculation about them.

How living organisms came into existence out of nonliving matter was an issue that evolutionists did not even want to mention for a long time. However, this question, which had constantly been avoided, eventually had to be addressed, and attempts were made to settle it with a series of experiments in the second quarter of the twentieth century.

The main question was: How could the first living cell have appeared in the primordial atmosphere on the earth? In other words, what kind of explanation could evolutionists offer?

The first person to take the matter in hand was the Russian biologist Alexander I. Oparin, the founder of the concept of "**chemical evolution.**" Despite all his theoretical studies, Oparin was unable to produce any results to shed light on the origin of life. He says the following in his book *The Origin of Life*, published in 1936:

Unfortunately, however, the problem of the origin of the cell is perhaps the most obscure point in the whole study of the evolution of organisms.<sup>250</sup>

Since Oparin, evolutionists have performed countless experiments, conducted research, and made observations to prove that a cell could have been formed by chance. However, every such attempt only made the complex design of the cell clearer, and thus refuted the evolutionists' hypotheses even more. Professor Klaus Dose, the president of the Institute of Biochemistry at the University of Johannes Gutenberg, states:

More than 30 years of experimentation on the origin of life in the fields of chemical and molecular evolution have led to a better perception of the immensity of the problem of the origin of life on earth rather than to its solution. At present all discussions on principal **theories and experiments in the field either end in stalemate or in a confession of ignorance.**<sup>251</sup>

In his book *The End of Science*, the evolutionary science writer John Horgan says of the origin of life, "**This is by far the weakest strut of the chassis of modern biology.**"<sup>252</sup>

The following statement by the geochemist Jeffrey Bada, from the San

Diego-based Scripps Institute, makes the helplessness of evolutionists clear:

Today, as we leave the twentieth century, we still face **the biggest unsolved problem that we had when we entered the twentieth century: How did life originate on Earth?**<sup>253</sup>

Let us now look at the details of the theory of evolution's "biggest unsolved problem". The first subject we have to consider is the famous Miller experiment.

### **Miller's Experiment**

The most generally respected study on the origin of life is the Miller experiment conducted by the American researcher Stanley Miller in 1953. (The experiment is also known as the "Urey-Miller experiment" because of the contribution of Miller's instructor at the University of Chicago, Harold Urey.) This experiment is the only "evidence" evolutionists have with which to allegedly prove the "chemical evolution thesis"; they advance it as the first stage of the supposed evolutionary process leading to life. Although nearly half a century has passed, and great technological advances have been made, nobody has made any further progress. In spite of this, Miller's experiment is still taught in textbooks as the evolutionary explanation of the earliest generation of living things. That is because, aware of the fact that such studies do not support, but rather actually refute, their thesis, evolutionist researchers deliberately avoid embarking on such experiments.



**Stanley Miller with his experimental apparatus.**

Stanley Miller's aim was to demonstrate by means of an experiment that amino acids, the building blocks of proteins, could have come into existence "by chance" on the lifeless earth billions of years ago. In his experiment, Miller used a gas mixture that he assumed to have existed on the primordial earth (but which later proved unrealistic), composed of ammonia, methane, hydrogen, and water vapor. Since these gases would

not react with each other under natural conditions, he added energy to the mixture to start a reaction among them. Supposing that this energy could have come from lightning in the primordial atmosphere, he used an electric current for this purpose.

Miller heated this gas mixture at 100°C for a week and added the electrical current. At the end of the week, Miller analyzed the chemicals which had formed at the bottom of the jar, and observed that three out of the 20 amino acids which constitute the basic elements of proteins had been synthesized.

This experiment aroused great excitement among evolutionists, and was promoted as an outstanding success. Moreover, in a state of intoxicated euphoria, various publications carried headlines such as "Miller creates life." However, what Miller had managed to synthesize was only a few inanimate molecules.

Encouraged by this experiment, evolutionists immediately produced new scenarios. Stages following the development of amino acids were hurriedly hypothesized. Supposedly, amino acids had later united in the correct sequences by accident to form proteins. Some of these proteins which emerged by chance formed themselves into cell membrane-like structures which "somehow" came into existence and formed a primitive cell. These cells then supposedly came together over time to form multicellular living organisms.

However, Miller's experiment has since proven to be false in many respects.

### **Four Facts That Invalidate Miller's Experiment**

Miller's experiment sought to prove that amino acids could form on their own in primordial earth-like conditions, but it contains inconsistencies in a number of areas:

1- By using a mechanism called a "**cold trap**," Miller isolated the amino acids from the environment as soon as they were formed. Had he not done so, the conditions in the environment in which the amino acids were formed would immediately have destroyed these molecules.

Doubtless, this kind of conscious isolation mechanism did not exist on the primordial earth. Without such a mechanism, even if one amino

acid were obtained, it would immediately have been destroyed. The chemist Richard Bliss expresses this contradiction by observing that "Actually, without this trap, the chemical products, would have been destroyed by the energy source."<sup>254</sup> And, sure enough, in his previous experiments, Miller had been unable to make even one single amino acid using the same materials without the cold trap mechanism.

2- The primordial atmosphere that Miller attempted to simulate in his experiment was not realistic. In the 1980s, scientists agreed that **nitrogen and carbon dioxide should have been used in this artificial environment instead of methane and ammonia.**

So why did Miller insist on these gases? The answer is simple: without ammonia, it was impossible to synthesize any amino acid. Kevin Mc Kean talks about this in an article published in *Discover* magazine:

Miller and Urey imitated the ancient atmosphere on the Earth with a mixture of methane and ammonia. ...However in the latest studies, it has been understood that the Earth was very hot at those times, and that it was composed of melted nickel and iron. Therefore, the chemical atmosphere of that time should have been formed mostly of nitrogen ( $N_2$ ), carbon dioxide ( $CO_2$ ) and water vapour ( $H_2O$ ). However these are not as appropriate as methane and ammonia for the production of organic molecules.<sup>255</sup>

The American scientists J. P. Ferris and C. T. Chen repeated Miller's experiment with an atmospheric environment that contained carbon dioxide, hydrogen, nitrogen, and water vapor, and were unable to obtain even a single amino acid molecule.<sup>256</sup>

3- Another important point that invalidates Miller's experiment is that **there was enough oxygen to destroy all the amino acids in the atmosphere**

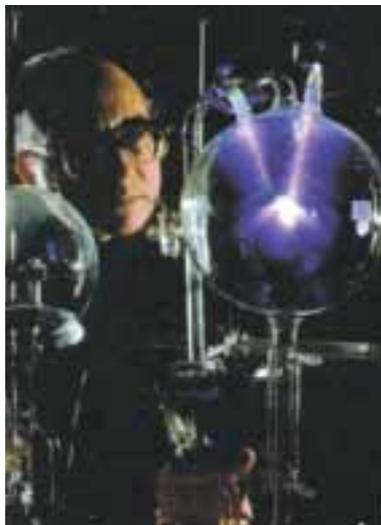


**The artificial atmosphere created by Miller in his experiment actually bore not the slightest resemblance to the primitive atmosphere on earth.**

at the time when they were thought to have been formed. This fact, overlooked by Miller, is revealed by the traces of oxidized iron found in rocks that are estimated to be 3.5 billion years old.<sup>257</sup>

There are other findings showing that the amount of oxygen in the atmosphere at that time was much higher than originally claimed by evolutionists. Studies also show that the amount of ultraviolet radiation to which the earth was then exposed was 10,000 times more than evolutionists' estimates. This intense radiation would unavoidably have freed oxygen by decomposing the water vapor and carbon dioxide in the atmosphere.

This situation completely negates Miller's experiment, in which oxygen was completely neglected. If oxygen had been used in the experiment, methane would have decomposed into carbon dioxide and water, and ammonia into nitrogen and water. On the other hand, in an environment where there was no oxygen, there would be no ozone layer either; therefore, the amino acids would have immediately been destroyed, since they would have been exposed to the most intense ultraviolet rays without the protection of the ozone layer. In other words,



**Today, Miller too accepts that his 1953 experiment was very far from explaining the origin of life.**

with or without oxygen in the primordial world, the result would have been a deadly environment for the amino acids.

4- At the end of Miller's experiment, many organic acids had also been formed with characteristics detrimental to the structure and function of living things. If the amino acids had not been isolated, and had been left in the same environment with these chemicals, their destruction or transformation into different compounds through chemical reactions would have been unavoidable.

Moreover, Miller's experiment also produced right-handed amino

acids.<sup>258</sup> The existence of these amino acids refuted the theory even within its own terms, because right-handed amino acids cannot function in the composition of living organisms. To conclude, the circumstances in which amino acids were formed in Miller's experiment were not suitable for life. In truth, this medium took the form of an acidic mixture destroying and oxidizing the useful molecules obtained.

All these facts point to one firm truth: Miller's experiment cannot claim to have proved that living things formed by chance under primordial earth-like conditions. The whole experiment is nothing more than a deliberate and controlled laboratory experiment to synthesize amino acids. The amount and types of the gases used in the experiment were ideally determined to allow amino acids to originate. The amount of energy supplied to the system was neither too much nor too little, but arranged precisely to enable the necessary reactions to occur. The experimental apparatus was isolated, so that it would not allow the leaking of any harmful, destructive, or any other kind of elements to hinder the formation of amino acids. No elements, minerals or compounds that were likely to have been present on the primordial earth, but which would have changed the course of the reactions, were included in the experiment. Oxygen, which would have prevented the formation of amino acids because of oxidation, is only one of these destructive elements. Even under such ideal laboratory conditions, it was impossible for the amino acids produced to survive and avoid destruction without the "cold trap" mechanism.

In fact, by his experiment, Miller destroyed evolution's claim that "life emerged as the result of unconscious coincidences." That is because, if the experiment proves anything, it is that amino acids can only be produced in a controlled laboratory environment where all the conditions are specifically designed by conscious intervention.

Today, Miller's experiment is totally disregarded even by evolutionist scientists. In the February 1998 issue of the famous evolutionist science journal *Earth*, the following statements appear in an article titled "Life's Crucible":

Geologist now think that the primordial atmosphere consisted mainly of carbon dioxide and nitrogen, gases that are less reactive than those used in the 1953 experiment. And even if Miller's atmosphere could have existed,

how do you get simple molecules such as amino acids to go through the necessary chemical changes that will convert them into more complicated compounds, or polymers, such as proteins? **Miller himself** throws up his hands at that part of the puzzle. **"It's a problem," he sighs with exasperation.** "How do you make polymers? That's not so easy."<sup>259</sup>

As seen, today even Miller himself has accepted that his experiment does not lead to an explanation of the origin of life. In the March 1998 issue of *National Geographic*, in an article titled "The Emergence of Life on Earth," the following comments appear:

Many scientists now **suspect that the early atmosphere was different to what Miller first supposed.** They think it consisted of carbon dioxide and nitrogen rather than hydrogen, methane, and ammonia.

That's bad news for chemists. When they try sparking carbon dioxide and nitrogen, they get a paltry amount of organic molecules - the equivalent of dissolving a drop of food colouring in a swimming pool of water. Scientists find it hard to imagine life emerging from such a diluted soup.<sup>260</sup>

In brief, neither Miller's experiment, nor any other similar one that has been attempted, can answer the question of how life emerged on earth. All of the research that has been done shows that it is impossible for life to emerge by chance, and thus confirms that life is created. The reason evolutionists do not accept this obvious reality is their blind adherence to prejudices that are totally unscientific. Interestingly enough, Harold Urey, who organized the Miller experiment with his student Stanley Miller, made the following confession on this subject:

All of us who study the origin of life **find that the more we look into it, the more we feel it is too complex to have evolved anywhere.** We all believe as an article of faith that life evolved from dead matter on this planet. It is just that its complexity is so great, it is hard for us to imagine that it did.<sup>261</sup>

## **The Primordial Atmosphere and Proteins**

Evolutionist sources use the Miller experiment, despite all of its inconsistencies, to try to gloss over the question of the origin of amino acids. By giving the impression that the issue has long since been resolved

by that invalid experiment, they try to paper over the cracks in the theory of evolution.

However, to explain the second stage of the origin of life, evolutionists faced an even greater problem than that of the formation of amino acids—namely, the origin of proteins, the building blocks of life, which are composed of hundreds of different amino acids bonding with each other in a particular order.

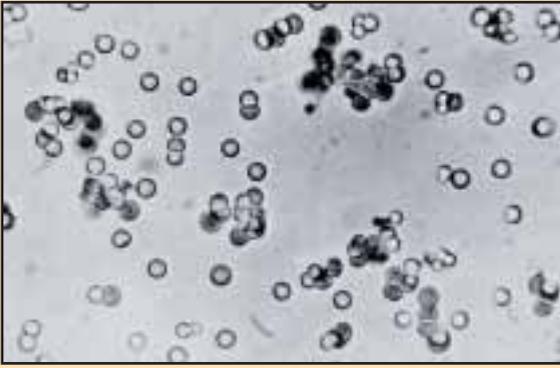
Claiming that proteins were formed by chance under natural conditions is even more unrealistic and unreasonable than claiming that amino acids were formed by chance. In the preceding pages we have seen the mathematical impossibility of the haphazard uniting of amino acids in proper sequences to form proteins with probability calculations. Now, we will examine the impossibility of proteins being produced chemically under primordial earth conditions.

### **The Problem of Protein Synthesis in Water**

As we saw before, when combining to form proteins, amino acids form a special bond with one another called the peptide bond. A water molecule is released during the formation of this peptide bond.

This fact definitely refutes the evolutionist explanation that primordial life originated in water, because, according to the "Le Châtelier principle" in chemistry, it is not possible for a reaction that releases water (a condensation reaction) to take place in a hydrous environment. The chances of this kind of a reaction happening in a hydrate environment is said to "have the least probability of occurring" of all chemical reactions.

Hence the ocean, which is claimed to be where life began and amino acids originated, is definitely not an appropriate setting for amino acids to form proteins.<sup>262</sup> On the other hand, it would be irrational for evolutionists to change their minds and claim that life originated on land, because the only environment where amino acids could have been protected from ultraviolet radiation is in the oceans and seas. On land, they would be destroyed by ultraviolet rays. The **Le Châtelier principle**, on the other hand, disproves the claim of the formation of life in the sea. This is another dilemma confronting evolution.



### FOX'S "PROTEINOIDS"

Sydney Fox, who was influenced by Miller's scenario, formed the above molecules, which he called "proteinoids," by joining amino acids together. However, these chains of nonfunctioning amino acids had no resemblance to the real proteins that make up the bodies of living things. Actually, all these efforts showed not only that life did not come about by chance, but also that it could not be reproduced in laboratory conditions.

## Fox's Experiment

Challenged by the above dilemma, evolutionists began to invent unrealistic scenarios based on this "water problem" that so definitively refuted their theories. Sydney Fox was one of the best known of these researchers. Fox advanced the following theory to solve the problem. According to him, the first amino acids must have been transported to some cliffs near a volcano right after their formation in the primordial ocean. The water contained in this mixture that included the amino acids must have evaporated when the temperature increased above boiling point on the cliffs. The amino acids which were "dried out" in this way, could then have combined to form proteins.

However this "complicated" way out was not accepted by many people in the field, because the amino acids could not have endured such high temperatures. Research confirmed that amino acids are immediately destroyed at very high temperatures.

But Fox did not give up. He combined purified amino acids in the laboratory, "under very special conditions," by heating them in a dry environment. The amino acids combined, but still no proteins were obtained. What he actually ended up with was simple and disordered loops of amino acids, arbitrarily combined with each other, and these

loops were far from resembling any living protein. Furthermore, if Fox had kept the amino acids at a steady temperature, then these useless loops would also have disintegrated.

Another point that nullified the experiment was that Fox did not use the useless end products obtained in Miller's experiment; rather, he used pure amino acids from living organisms. This experiment, however, which was intended to be a continuation of Miller's experiment, should have started out from the results obtained by Miller. Yet neither Fox, nor any other researcher, used the useless amino acids Miller produced.

Fox's experiment was not even welcomed in evolutionist circles, because it was clear that the meaningless amino acid chains that he obtained (which he termed "proteinoids") could not have formed under natural conditions. Moreover, proteins, the basic units of life, still could not be produced. The problem of the origin of proteins remained unsolved. In an article in the popular science magazine, *Chemical Engineering News*, which appeared in the 1970s, Fox's experiment was mentioned as follows:

Sydney Fox and the other researchers managed to unite the amino acids in the shape of "proteinoids" by using very special heating techniques under conditions which in fact did not exist at all in the primordial stages of Earth. Also, they are not at all similar to the very regular proteins present in living things. They are nothing but useless, irregular chemical stains. It was explained that even if such molecules had formed in the early ages, they would definitely be destroyed.<sup>263</sup>

Indeed, the proteinoids Fox obtained were totally different from real proteins, both in structure and function. The difference between proteins and these proteinoids was as huge as the difference between a piece of high-tech equipment and a heap of unprocessed iron.

Furthermore, there was no chance that even these irregular amino acid chains could have survived in the primordial atmosphere. Harmful and destructive physical and chemical effects caused by heavy exposure to ultraviolet light and other unstable natural conditions would have caused these proteinoids to disintegrate. Because of the Le Châtelier principle, it was also impossible for the amino acids to combine underwater, where ultraviolet rays would not reach them. In view of this, the idea that the proteinoids were the basis of life eventually lost support among scientists.



**When Watson and Crick discovered the structure of DNA, they revealed that life was much more complicated than had previously been thought.**

## **The Origin of the DNA Molecule**

Our examinations so far have shown that the theory of evolution is in a serious quandary at the molecular level. Evolutionists have shed no light on the formation of amino acids at all. The formation of proteins, on the other hand, is another mystery all its own.

Yet the problems are not even limited just to amino acids and proteins: These are only the beginning. Beyond them, the extremely complex structure of the cell leads evolutionists to yet another impasse. The reason for this is that the cell is not just a heap of amino-acid-structured proteins, but rather the most complex system man has ever encountered.

While the theory of evolution was having such trouble providing a coherent explanation for the existence of the molecules that are the basis of the cell structure, developments in the science of genetics and the discovery of nucleic acids (DNA and RNA) produced brand-new problems for the theory. In 1953, James Watson and Francis Crick launched a new age in biology with their work on the structure of DNA.

The molecule known as DNA, which is found in the nucleus of each of the 100 trillion cells in our bodies, contains the complete blueprint for

the construction of the human body. The information regarding all the characteristics of a person, from physical appearance to the structure of the inner organs, is recorded in DNA within the sequence of four special bases that make up the giant molecule. These bases are known as A, T, G, and C, according to the initial letters of their names. All the structural differences among people depend on variations in the sequences of these letters. In addition to features such as height, and eye, hair and skin colors, the DNA in a single cell also contains the design of the 206 bones, the 600 muscles, the 100 billion nerve cells (neurons), 1.000 trillion connections between the neurons of the brain, 97,000 kilometers of veins, and the 100 trillion cells of the human body. If we were to write down the information coded in DNA, then we would have to compile a giant library consisting of 900 volumes of 500 pages each. But the information this enormous library would hold is encoded inside the DNA molecules in the cell nucleus, which is far smaller than the 1/100th-of-a-millimeter-long cell itself.

### **DNA Cannot Be Explained by Non-Design**

At this point, there is an important detail that deserves attention. An error in the sequence of the nucleotides making up a gene would render that gene completely useless. When it is considered that there are 200,000 genes in the human body, it becomes clearer how impossible it is for the millions of nucleotides making up these genes to have been formed, in the right sequence, by chance. The evolutionary biologist Frank Salisbury has comments on this impossibility:

A medium protein might include about 300 amino acids. The DNA gene controlling this would have about 1,000 nucleotides in its chain. Since there are four kinds of nucleotides in a DNA chain, one consisting of 1,000 links could exist in  $4^{1,000}$  forms. Using a little algebra (logarithms) we can see that  $4^{1,000}=10^{600}$ . Ten multiplied by itself 600 times gives the figure 1 followed by 600 zeros! This number is completely beyond our comprehension.<sup>264</sup>

The number  $4^{1,000}$  is the equivalent of  $10^{600}$ . This means 1 followed by 600 zeros. As 1 with 12 zeros after it indicates a trillion, 600 zeros represents an inconceivable number.

The impossibility of the formation of RNA and DNA by a coincidental accumulation of nucleotides is expressed by the French

scientist Paul Auger in this way:

We have to sharply distinguish the two stages in the chance formation of complex molecules such as nucleotides by chemical events. The production of nucleotides one by one—which is possible—and the combination of these within very special sequences. The second is absolutely impossible.<sup>265</sup>

For many years, Francis Crick believed in the theory of molecular evolution, but eventually even he had to admit to himself that such a complex molecule could not have emerged spontaneously by chance, as



DNA codes of the beta-globin gene. These codes make up one of the parts of the haemoglobin that carry oxygen in the blood. The important thing is that if there is an error in just one of these codes, the protein that is produced will be totally useless.

the result of an evolutionary process:

**An honest man, armed with all the knowledge available to us now, could only state that, in some sense, the origin of life appears at the moment to be almost a miracle.<sup>266</sup>**

The Turkish evolutionist Professor Ali Demirsoy was forced to make the following confession on the issue:

In fact, the probability of the formation of a protein and a nucleic acid (DNA-RNA) is a probability way beyond estimating. Furthermore, the chance of the emergence of a certain protein chain is so slight as to be called astronomic.<sup>267</sup>

A very interesting paradox emerges at this point: While DNA can only replicate with the help of special proteins (enzymes), the synthesis of these proteins can only be realized by the information encoded in DNA. As they both depend on each other, they have to exist at the same time for replication. Science writer John Horgan explains the dilemma in this way:

DNA cannot do its work, including forming more DNA, without the help of catalytic proteins, or enzymes. In short, **proteins cannot form without DNA, but neither can DNA form without proteins.**<sup>268</sup>

This situation once again undermines the scenario that life could have come about by accident. Homer Jacobson, Professor Emeritus of Chemistry, comments:

Directions for the reproduction of plans, for energy and the extraction of parts from the current environment, for the growth sequence, and for the effector mechanism translating instructions into growth—all had to be simultaneously present at that moment [when life began]. This combination of events has seemed an incredibly unlikely happenstance...<sup>269</sup>



**The extraordinary information concealed in DNA is clear proof that life did not emerge by chance, but was deliberately designed. No natural process can account for the origin of DNA.**

The quotation above was written two years after the discovery of the structure of DNA by Watson and Crick. But despite all the developments in science, this problem for evolutionists remains unsolved. This is why German biochemist Douglas R. Hofstadter says:

'How did the Genetic Code, along with the mechanisms for its translation (ribosomes and RNA molecules), originate?' For the moment, **we will have to content ourselves with a sense of wonder and awe, rather than with an answer.**<sup>270</sup>

Stanley Miller and Francis Crick's close associate from the University of San Diego, California, the highly reputed evolutionist Dr. Leslie Orgel says in an article published in 1994:

It is extremely improbable that proteins and nucleic acids, both of which are structurally complex, arose spontaneously in the same place at the same time. Yet it also seems impossible to have one without the other. And so, at first glance, **one might have to conclude that life could never, in fact, have originated by chemical means.**<sup>271</sup>

Alongside all of this, it is chemically impossible for nucleic acids such as DNA and RNA, which possess a definite string of information, to have emerged by chance, or for even one of the nucleotides which compose them to have come about by accident and to have survived and maintained its unadulterated state under the conditions of the primordial world. Even the famous journal *Scientific American*, which follows an evolutionist line, has been obliged to confess the doubts of evolutionists on this subject:

Even the simpler molecules are produced only in small amounts in realistic experiments simulating possible primitive earth conditions. What is worse, these molecules are generally minor constituents of tars: **It remains problematical how they could have been separated and purified through geochemical processes whose normal effects are to make organic mixtures more and more of a jumble.** With somewhat more complex molecules these difficulties rapidly increase. **In particular a purely geochemical origin of nucleotides (the subunits of DNA and RNA) presents great difficulties.**<sup>272</sup>

Of course, the statement "it is quite impossible for life to have emerged by chemical means" simply means that life is the product of an intelligent design. This "chemical evolution" that evolutionists have been talking about since the beginning of the last century never happened, and

is nothing but a myth.

But most evolutionists believe in this and similar totally unscientific fairy tales as if they were true, because accepting intelligent design means accepting creation—and they have conditioned themselves not to accept this truth. One famous biologist from Australia, Michael Denton, discusses the subject in his book *Evolution: A Theory in Crisis*:

To the skeptic, the proposition that the genetic programmes of higher organisms, consisting of something close to a thousand million bits of information, equivalent to the sequence of letters in a small library of 1,000 volumes, containing in encoded form countless thousands of intricate algorithms controlling, specifying, and ordering the growth and development of billions and billions of cells into the form of a complex organism, were composed by a purely random process is simply an affront to reason. But to the Darwinist, the idea is accepted without a ripple of doubt - the paradigm takes precedence!<sup>273</sup>

### **The Invalidity of the RNA World**

The discovery in the 1970s that the gases originally existing in the primitive atmosphere of the earth would have rendered amino acid synthesis impossible was a serious blow to the theory of molecular evolution. Evolutionists then had to face the fact that the "primitive atmosphere experiments" by Stanley Miller, Sydney Fox, Cyril Ponnamperuma and others were invalid. For this reason, in the 1980s the evolutionists tried again. As a result, the "RNA World" hypothesis was advanced. This scenario proposed that, not proteins, but rather the RNA molecules that contained the information for proteins, were formed first.

According to this scenario, advanced by Harvard chemist Walter Gilbert in 1986, inspired by the discovery about "ribozymes" by Thomas Cech, billions of years ago an RNA molecule capable of replicating itself formed somehow by accident. Then this RNA molecule started to produce proteins, having been activated by external influences. Thereafter, it became necessary to store this information in a second molecule, and somehow the DNA molecule emerged to do that.

Made up as it is of a chain of impossibilities in each and every stage, this scarcely credible scenario, far from providing any explanation of the origin of life, only magnified the problem, and raised many unanswerable

questions:

1. Since it is impossible to accept the coincidental formation of even one of the nucleotides making up RNA, how can it be possible for these imaginary nucleotides to form RNA by coming together in a particular sequence? Evolutionist John Horgan admits the impossibility of the chance formation of RNA;

As researchers continue to examine the RNA-World concept closely, more problems emerge. How did RNA initially arise? RNA and its components are difficult to synthesize in a laboratory under the best of conditions, much less under really plausible ones.<sup>274</sup>

2. Even if we suppose that it formed by chance, how could this RNA, consisting of just a nucleotide chain, have "decided" to self-replicate, and with what kind of mechanism could it have carried out this self-replicating process? Where did it find the nucleotides it used while self-replicating? Even evolutionist microbiologists Gerald Joyce and Leslie Orgel express the desperate nature of the situation in their book *In the RNA World*:

This discussion... has, in a sense, focused on a straw man: the myth of a self-replicating RNA molecule that arose de novo from a soup of random polynucleotides. Not only is such a notion unrealistic in light of our current understanding of prebiotic chemistry, but it would strain the credulity of even an optimist's view of RNA's catalytic potential.<sup>275</sup>

3. Even if we suppose that there was self-replicating RNA in the primordial world, that numerous amino acids of every type ready to be used by RNA were available, and that all of these impossibilities somehow took place, the situation still does not lead to the formation of even one single protein. For RNA only includes information concerning the structure of proteins. Amino acids, on the other hand, are raw materials. Nevertheless, there is no mechanism for the production of proteins. To consider the existence of RNA sufficient for protein production is as nonsensical as expecting a car to assemble itself by simply throwing the blueprint onto a heap of parts piled up on top of each other. A blueprint cannot produce a car all by itself without a factory and workers to assemble the parts according to the instructions contained in the blueprint; in the same way, the blueprint contained in RNA cannot produce proteins by itself without the cooperation of other cellular components which

follow the instructions contained in the RNA.

Proteins are produced in the ribosome factory with the help of many enzymes, and as a result of extremely complex processes within the cell. The ribosome is a complex cell organelle made up of proteins. This leads, therefore, to another unreasonable supposition—that ribosomes, too, should have come into existence by chance at the same time. Even Nobel Prize winner Jacques Monod, who was one of the most fanatical defenders of evolution—and atheism—explained that protein synthesis can by no means be considered to depend merely on the information in the nucleic acids:

The code is meaningless unless translated. The modern cell's translating machinery consists of at least 50 macromolecular components, *which are themselves coded in DNA: the code cannot be translated otherwise than by products of translation themselves. It is the modern expression of omne vivum ex ovo. When and how did this circle become closed? It is exceedingly difficult to imagine.*<sup>276</sup>

How could an RNA chain in the primordial world have taken such a decision, and what methods could it have employed to make protein production happen by doing the work of 50 specialized particles on its own? Evolutionists have no answer to these questions. One article in the preeminent scientific journal *Nature* makes it clear that the concept of "self-replicating RNA" is a complete product of fantasy, and that actually this kind of RNA has not been produced in any experiment:

DNA replication is so error-prone that it needs the prior existence of protein enzymes to improve the copying fidelity of a gene-size piece of DNA. "Catch-22" say Maynard Smith and Szathmary. So, wheel on RNA with its now recognized properties of carrying both informational and enzymatic activity, leading the authors to state: "In essence, the first RNA molecules did not need a protein polymerase to replicate them; they replicated themselves." Is this a fact or a hope? I would have thought it relevant to point out for 'biologists in general' that **not one self-replicating RNA has emerged to date from quadrillions ( $10^{24}$ ) of artificially synthesized, random RNA sequences.**<sup>277</sup>

Dr. Leslie Orgel, one of the associates of Stanley Miller and Francis Crick from the University of California at San Diego, uses the term "scenario" for the possibility of "the origination of life through the RNA

World." Orgel described what kind of features this RNA would have had to have and how impossible these would have been in his article "The Origin of Life," published in *Scientific American* in October 1994:

This scenario could have occurred, we noted, if prebiotic RNA had two properties not evident today: A capacity to replicate without the help of proteins and an ability to catalyze every step of protein synthesis.<sup>278</sup>

As should by now be clear, to expect these two complex and extremely essential processes from a molecule such as RNA is against scientific thought. Concrete scientific facts, on the other hand, makes it explicit that the RNA World hypothesis, which is a new model proposed for the chance formation of life, is an equally implausible fable.

John Horgan, in his book *The End of Science*, reports that Stanley Miller viewed the theories subsequently put forward regarding the origin of life as quite meaningless (It will be recalled that Miller was the originator of the famous Miller Experiment, which was later revealed to be invalid.):

In fact, almost 40 years after his original experiment, Miller told me that solving the riddle of the origin of life had turned out to be more difficult than he or anyone else had envisioned... Miller seemed unimpressed with any of the current proposals on the origin of life, referring to them as "nonsense" or "paper chemistry." He was so contemptuous of some hypotheses that, when I asked his opinion of them, he merely shook his head, sighed deeply, and snickered—as if overcome by the folly of humanity. Stuart Kauffman's theory of autocatalysis fell into this category. "Running equations through a computer does not constitute an experiment," Miller sniffed. Miller acknowledged that scientists may never know precisely where and when life emerged.<sup>279</sup>

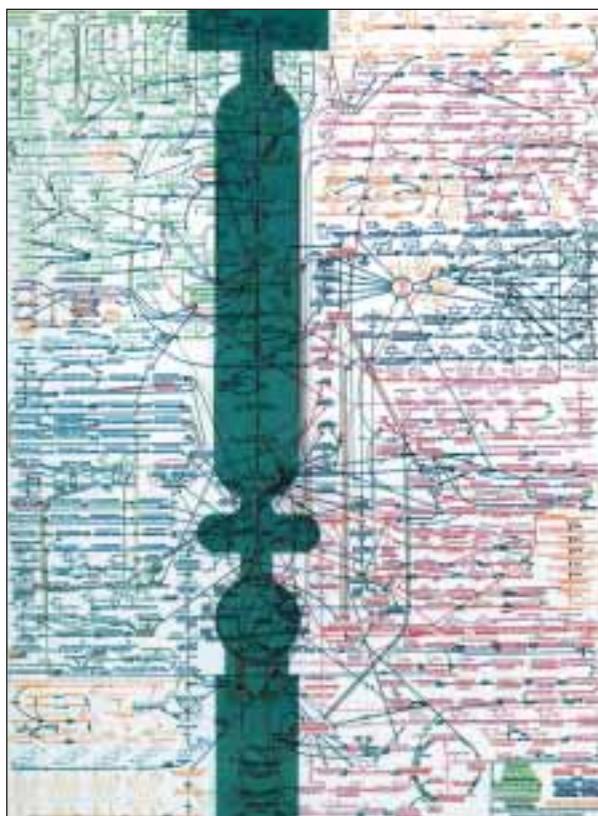
This statement, by a pioneer of the struggle to find an evolutionary explanation for the origin of life, clearly reflects the despair felt by evolutionist scientists over the cul-de-sac they find themselves in.

### **Can Design Be Explained by Coincidence?**

So far, we have examined how impossible the accidental formation of life is. Let us again ignore these impossibilities for just a moment. Let us suppose that millions of years ago a cell was formed which had acquired

everything necessary for life, and that it duly "came to life." Evolution again collapses at this point. For even if this cell had existed for a while, it would eventually have died and after its death, nothing would have remained, and everything would have reverted to where it had started. This is because this first living cell, lacking any genetic information, would not have been able to reproduce and start a new generation. Life would have ended with its death.

The genetic system does not only consist of DNA. The following things must also exist in the same environment: enzymes to read the code on the DNA, messenger RNA to be produced after reading these codes, a ribosome to which messenger RNA will attach according to this code, transfer RNA to transfer the amino acids to the ribosome for use in production, and extremely complex enzymes to carry out numerous intermediary processes. Such an environment cannot exist anywhere apart



**This illustration shows the sketch of the chemical reactions taking place in a single cell. These intricate activities in the cell, which can only be viewed with an electron microscope, continue to take place flawlessly and ceaselessly.**

from a totally isolated and completely controlled environment such as the cell, where all the essential raw materials and energy resources exist.

As a result, organic matter can self-reproduce only if it exists as a fully developed cell, with all its organelles. This means that the first cell on earth was formed "all of a sudden," together with its incredibly complex structure.

So, if a complex structure came into existence all of a sudden, what does this mean?

Let us ask this question with an example. Let us liken the cell to a high-tech car in terms of its complexity. (In fact, the cell is a much more complex and developed system than a car .) Now let us ask the following question: What would you think if you went out hiking in the depths of a thick forest and ran across a brand-new car among the trees? Would you imagine that various elements in the forest had come together by chance over millions of years and produced such a vehicle? All the parts in the car are made of products such as iron, copper, and rubber—the raw ingredients for which are all found on the earth—but would this fact lead you to think that these materials had synthesized "by chance" and then come together and manufactured such a car?

There is no doubt that anyone with a sound mind would realize that the car was the product of an intelligent design—in other words, a factory—and wonder what it was doing there in the middle of the forest. The sudden emergence of a complex structure in a complete form, quite out of the blue, shows that this is the work of an intelligent design.

Believing that pure chance can produce perfect designs goes well beyond the bounds of reason. Yet every "explanation" put forward by the theory of evolution regarding the origin of life is like that. One outspoken authority on this issue is the famous French zoologist Pierre-Paul Grassé, the former president of the French Academy of Sciences. Grassé is an evolutionist, yet he acknowledges that Darwinist theory is unable to explain life and makes a point about the logic of "coincidence," which is the backbone of Darwinism:

The opportune appearance of mutations permitting animals and plants to meet their needs seems hard to believe. Yet the Darwinian theory is even more demanding: A single plant, a single animal would require thousands and thousands of lucky, appropriate events. Thus, **miracles would become**

**the rule: events with an infinitesimal probability could not fail to occur... There is no law against daydreaming, but science must not indulge in it.**<sup>280</sup>

All living things in the world, all of which are clear examples of the intelligent planning we have just been discussing, are at the same time living evidence that coincidence can have no role to play in their existence. Each of its component parts—never mind a whole living creature—contains structures and systems so complex that they cannot be the work of coincidence. We need go no further than our own bodies to find examples of this.

One example of this is our eyes. The human eye sees by the working together of some 40 separate parts. If one of these is not present, the eye will be useless. Each of these 40 parts possesses complicated designs within itself. The retina at the back of the eye, for instance, is made up of 11 layers. Each layer has a different function. The chemical processes that go on inside the retina are so complex that they can only be explained with pages full of formulae and diagrams.

The theory of evolution is unable to account for the emergence of even such a flawless and complex structure as a single eye by means of "accident," let alone life itself, or mankind.

So, what does this extraordinary design in living things prove to us about the origin of life? As we made clear in the opening part of this book, only two different accounts can be given regarding the origin of life. One is evolution, the other intelligent creation. Since the evolution claim is impossible, scientific discoveries therefore prove the truth of creation. This truth may surprise some scientists, who from the nineteenth century to the present have seen the concept of "creation" as unscientific, but science can only progress by overcoming shocks of this kind and accepting the truth. Chandra Wickramasinghe describes the reality he faced as a scientist who had been told throughout his life that life had emerged as a result of chance coincidences:

From my earliest training as a scientist, I was very strongly brainwashed to believe that science cannot be consistent with any kind of deliberate creation. That notion has had to be painfully shed. At the moment, I can't find any rational argument to knock down the view which argues for conversion to God. We used to have an open mind; now we realize that the only logical answer to life is creation - and not accidental random shuffling.<sup>281</sup>



# THE MYTH OF HOMOLOGY

Anyone who studies the different living species in the world may observe that there are some similar organs and features among these species. The first person to draw materialistic conclusions from this fact, which has attracted scientists' attention since the eighteenth century, was Charles Darwin.

Darwin thought that creatures with similar (homologous) organs had an evolutionary relationship with each other, and that these organs must have been inherited from a common ancestor. According to his assumption, both pigeons and eagles had wings; therefore, pigeons, eagles and indeed all other birds with wings were supposed to have evolved from a common ancestor.

Homology is a tautological argument, advanced on the basis of no other evidence than an apparent physical resemblance. This argument has never once been verified by a single concrete discovery in all the years since Darwin's day. Nowhere in the world has anyone come up with a fossil remain of the imaginary common ancestor of creatures with homologous structures. Furthermore, the following issues make it clear that homology provides no evidence that evolution ever occurred.

1. One finds homologous organs in creatures belonging to completely different phyla, among which evolutionists have not been able to establish any sort of evolutionary relationship;
2. The genetic codes of some creatures that have homologous organs are completely different from one another.

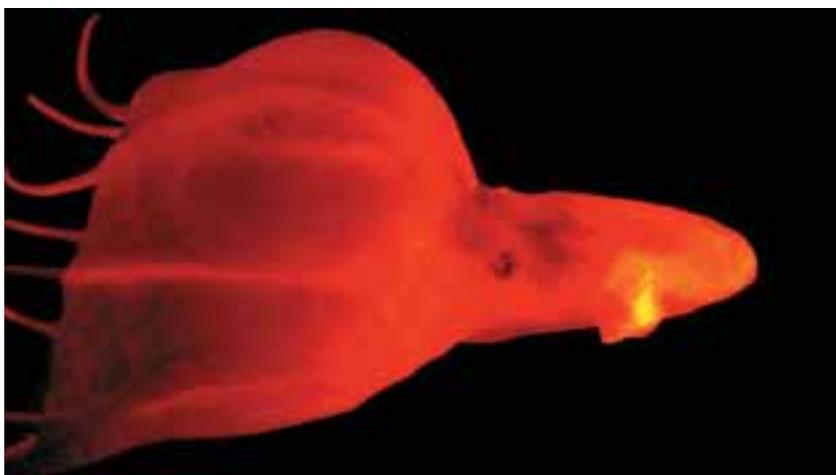
3. The embryological development of homologous organs in different creatures is completely different.

Let us now examine each of these points one by one.

### **The Invalidity of Morphological Homology**

The homology thesis of the evolutionists is based on the logic of building an evolutionary link between all living things with similar morphologies (structures), whereas there are a number of homologous organs shared by different groups that are completely unrelated to each other. Wings are one example. In addition to birds, we find wings on bats, which are mammals, and on insects and even on some dinosaurs, which are extinct reptiles. Not even evolutionists posit an evolutionary relationship or kinship among those four different groups of animals.

Another striking example is the amazing resemblance and the structural similarity observed in the eyes of different creatures. For example, the octopus and man are two extremely different species, between which no evolutionary relationship is likely even to be proposed, yet the eyes of both are very much alike in terms of their structure and function. Not even evolutionists try to account for the similarity of the



According to the "tree of life" proposed by evolutionists, octopuses are some of the remotest creatures from man. But the octopus eye has exactly the same structure as ours. This is an indication that similarity of structure is no evidence for evolution.

eyes of the octopus and man by positing a common ancestor.

In response, evolutionists say that these organs are not "**homologous**" (in other words, from a common ancestor), but that they are "**analogous**" (very similar to each other, although there

is no evolutionary connection between them). For example, in their view, the human eye and the octopus eye are analogous organs.

However, the question of which category they will put an organ into, homologous or analogous, is answered totally in

line with the theory of evolution's preconceptions. And this shows that the evolutionist claim based on resemblances is completely unscientific.

The only thing evolutionists do is to try to interpret new discoveries in accordance with a dogmatic evolutionary preconception.

However, the interpretation they put forward is completely invalid. Because organs which they have to consider "analogous" sometimes bear such close resemblance to one another, despite being exceedingly complex

structures, that it is totally inconsistent to propose that this similarity was brought about thanks to coincidental mutations. If an octopus eye emerged completely by coincidence, as evolutionists claim, then how is it that vertebrates' eyes can emerge by the very same coincidences? The famous evolutionist Frank Salisbury, who got dizzy from thinking about this question, writes:

The wings of a flying reptile, a bird, and a bat.

These wings, between which no evolutionary relationship can be established, possess similar structures.

Even something as complex as the eye has appeared several times; for example, in the squid, the vertebrates, and the arthropods. It's bad enough accounting for the origin of such things once, but **the thought of producing them several times according to the modern synthetic theory makes my head swim.**<sup>282</sup>



Starting with kangaroos, all mammals in the continent of Australia belong to the "pouched" or marsupial subclass. According to evolutionists, they have no evolutionary relationship with placental mammals in the other regions of the world.

According to the theory of evolution, wings emerged independently of each other four times: in insects, flying reptiles, birds, and flying mammals (bats). The fact that wing with very similar structures developed four times—which cannot be explained by the mechanisms of natural selection/mutation—is yet another headache for evolutionary biologists.

One of the most concrete examples of such an obstacle in the path of evolutionary theory can be seen in mammals. According to the accepted view of modern biology, all mammals belong to one of three basic categories: **placentals**, **marsupials** and **monotremes**. Evolutionists consider this distinction to have come about when mammals first appeared, and that each group lived its own evolutionary history totally independent of the other. But it is interesting that there are "pairs" in placentals and marsupials which are nearly the same. Placental wolves, cats, squirrels, anteaters, moles and mice all have their marsupial counterparts with closely similar morphologies.<sup>283</sup>

In other words, according to the theory of evolution, mutations completely independent of each other must have produced these creatures "by chance" twice! This reality is a question that will give evolutionists problems even worse than dizzy spells.

One of the interesting similarities between placental and marsupial mammals is that between the **North American wolf** and the **Tasmanian wolf**. The former belongs to the placental class, the latter to the marsupials. Evolutionary biologists believe that these two different species have completely separate evolutionary histories.<sup>284</sup> (Since the continent of Australia and the islands around it split off from Gondwanaland (the supercontinent that is supposed to be the originator of Africa, Antarctica, Australia, and South America) the link between placental and marsupial mammals is considered to have been broken, and at that time there were no wolves). But the interesting thing is that the skeletal structure of the

# MAMMAL TWINS THAT DEFY HOMOLOGY



The presence of "twin" species between marsupial and placental mammals deals a serious blow to the claim of homology. For example, the marsupial Tasmanian wolf (above) and the placental wolf found in North America resemble each other to an extraordinary degree. To the side can be seen the skulls of these two highly similar animals. Such a close resemblance between the two, which cannot be suggested to have any "evolutionary relationship," completely invalidates the claim of homology.



North American wolf skull.



Tasmanian wolf skull.



## TWO UNRELATED EXTINCT MAMMALS WITH GIANT TEETH

Another example of extraordinary resemblance between placental and marsupial mammal "twins," is that between the extinct mammals *Smilodon* (right) and *Thylacosmilus* (left), both predators with enormous front teeth. The great degree of resemblance between the skull and teeth structures of these two mammals, between which no evolutionary relationship can be established, overturns the homological view that similar structures are evidence in favor of evolution.

Tasmanian wolf is nearly identical to that of the North American wolf. Their skulls in particular, as shown on the next page, bear an extraordinary degree of resemblance to each other.

Extraordinary resemblances and similar organs like these, which evolutionary biologists cannot accept as examples of "homology," show that homology does not constitute any evidence for the thesis of evolution from a common ancestor. What is even more interesting is that the exact opposite situation is to be observed in other living things. In other words, there are living things, some of whose organs have completely different structures, even though they are considered to be close relatives by evolutionists. For example, most crustaceans have eye structures of the "refracting lens" type. In only two species of crustacean—the lobster and the shrimp—is the completely different "reflecting" type of eye seen. (See the chapter on Irreducible Complexity.)

### **The Genetic and Embryological Impasse of Homology**

The discovery which really overthrew homology is that organs accepted as "homologous" are almost all controlled by very different genetic codes. As we know, the theory of evolution proposes that living things developed through small, chance changes in their genes, in other words, mutations. For this reason, the genetic structures of living things which are seen as close evolutionary relatives should resemble each other. And, in particular, similar organs should be controlled by similar genetic structures. However, in point of fact, genetic researchers have made discoveries which conflict totally with this evolutionary thesis.

Similar organs are usually governed by very different genetic (DNA) codes. Furthermore, similar genetic codes in the DNA of different creatures are often associated with completely different organs. The chapter titled "The Failure of Homology" in Michael Denton's book, *Evolution: A Theory in Crisis*, gives several examples of this, and sums the subject up in this way:

Homologous structures are often specified by non-homologous genetic systems and the concept of homology can seldom be extended back into embryology.<sup>285</sup>

This genetic question has also been raised by the well-known

evolutionary biologist Gavin de Beer. In his book *Homology: An Unsolved Problem*, published in 1971, de Beer put forward a very wide-ranging analysis of this subject. He sums up why homology is a problem for the theory of evolution as follows:

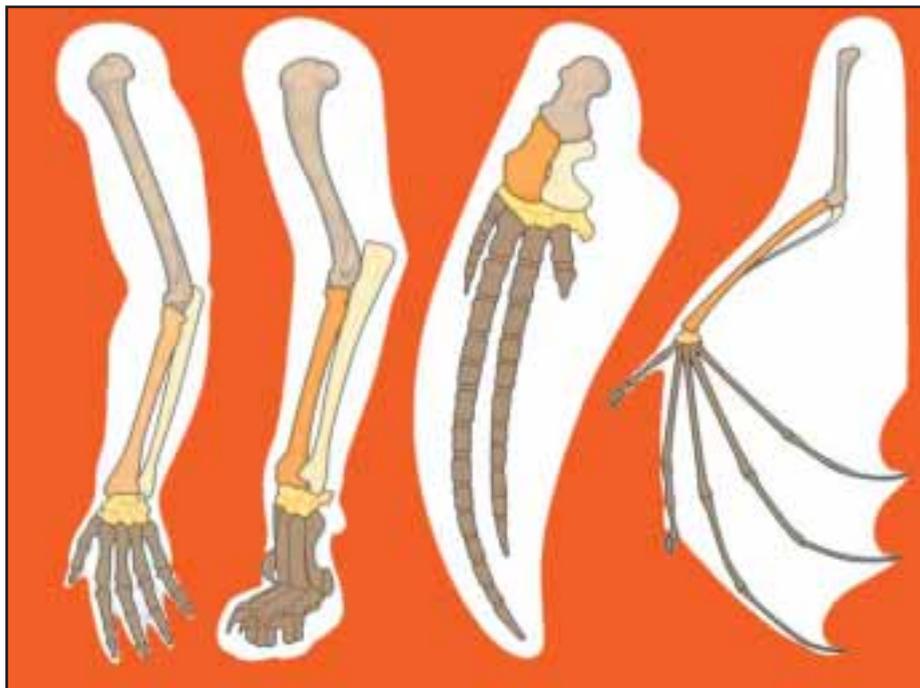
What mechanism can it be that results in the production of homologous organs, the same 'patterns', in spite of their not being controlled by the same genes? I asked this question in 1938, and it has not been answered.<sup>286</sup>

Although some 30 years have passed since de Beer wrote those words, they have still received no answer.

A third proof which undermines the homology claim is the question of embryological development, which we mentioned at the start. In order for the evolutionary thesis regarding homology to be taken seriously, the periods of similar structures' embryological development—in other words, the stages of development in the egg or the mother's womb—would need to be parallel, whereas, in reality, these embryological periods for similar structures are quite different from each other in every living creature. Pere Alberch, an eminent developmental biologist, noted, it is "the rule rather than the exception" that "homologous structures form from distinctly dissimilar initial states."<sup>287</sup>

The emergence of similar structures as the result of totally dissimilar processes is frequently seen in the latter stages of the development phase. As we know, many species of animal go through a stage known as "indirect development" (in other words the larva stage), on their way to adulthood. For instance, most frogs begin life as swimming tadpoles and turn into four-legged animals at the last stage of metamorphosis. But alongside this there are several species of frog which skip the larva stage and develop directly. But the adults of most of these species that develop directly are practically indistinguishable from those species which pass through the tadpole stage. The same phenomenon is to be seen in water chestnuts and some other similar species.<sup>288</sup>

To conclude, we can say that genetic and embryological research has proven that the concept of homology defined by Darwin as "evidence of the evolution of living things from a common ancestor" can by no means be regarded as any evidence at all. The inconsistency of homology, which looks quite convincing on the surface, is clearly revealed when examined more closely.



The fact that almost all land-dwelling vertebrates have a five-toed or "pentadactyl" bone structure in their hands and feet has for years been presented as "strong evidence for Darwinism" in evolutionist publications. However, recent research has revealed that these bone structures are governed by quite different genes. For this reason, the "homology of pentadactylism" assumption has today collapsed.

### **The Fall of the Homology in Tetrapod Limbs**

We have already examined homology's morphological claim—in other words the invalidity of the evolutionist claim based on similarities of form in living things—but it will be useful to examine one well-known example of this subject a little more closely. This is the "fore- and hindlimbs of quadrupeds," presented as a clear proof of homology in almost all books on evolution.

Quadrupeds, i.e., land-living vertebrates, have five digits on their fore- and hindlimbs. Although these may not always look like fingers or toes, they are all counted as "pentadactyl" (five-digit) due to their bone structure. The hands and feet of a frog, a lizard, a squirrel, or a monkey all have this same structure. Even the bone structures of birds and bats conform to this basic design.

Evolutionists claim that all living things descended from a common ancestor, and they have long cited pentadactyl limb as evidence of this. But they know that this claim actually possesses no scientific validity.

Even today, evolutionists accept the feature of pentadactylism in living things among which they have been able to establish no evolutionary link. For example, in two separate scientific papers published in 1991 and 1996, evolutionary biologist M. Coates reveals that pentadactylism emerged two separate times, each independently of the other. According to Coates, the pentadactyl structure emerged independently in anthracosaurs and amphibians.<sup>289</sup>

This discovery is a sign that pentadactylism is no evidence for a "common ancestor."

Another matter which creates difficulties for the evolutionist thesis in this respect is that these creatures have five digits on both their fore- and hindlimbs. It is not proposed in evolutionist literature that fore- and hindlimb descended from a "common limb"; rather, it is assumed that they developed separately. For this reason, it should be expected that the structure of the fore- and hindlimbs should be different, the result of different, chance mutations. Michael Denton has this to say on the subject:

[T]he *forelimbs* of all terrestrial vertebrates are constructed according to the same pentadactyl design, and this is attributed by evolutionary biologists as showing that all have been derived from a common ancestral source. But the hindlimbs of all vertebrates also conform to the pentadactyl pattern and are strikingly similar to the forelimbs in bone structure and in their detailed embryological development. Yet no evolutionist claims that the hindlimb evolved from the forelimb, or that *hindlimbs* and forelimbs evolved from a common source... Invariably, as biological knowledge has grown, common genealogy as an explanation for similarity has tended to grow ever more tenuous... **Like so much of the other circumstantial "evidence" for evolution, that drawn from homology is not convincing** because it entails too many anomalies, too many counter-instances, far too many phenomena which simply do not fit easily into the orthodox picture.<sup>290</sup>

But the real blow dealt to the evolutionist claim of the homology of pentadactylism came from molecular biology. The assumption of "the homology of pentadactylism," which was long maintained in evolutionist publications, was overturned when it was realized that the limb structures

were controlled by totally different genes in different creatures possessing this pentadactyl structure. Evolutionary biologist William Fix describes the collapse of the evolutionist thesis regarding pentadactylism in this way:

The older textbooks on evolution make much of the idea of homology, pointing out the obvious resemblances between the skeletons of the limbs of different animals. Thus the 'pentadactyl' [five bone] limb pattern is found in the arm of a man, the wing of a bird, and flipper of a whale, and this is held to indicate their common origin. Now **if these various structures were transmitted by the same gene couples, varied from time to time by mutations and acted upon by environmental selection, the theory would make good sense. Unfortunately this is not the case.** Homologous organs are now known to be produced by totally different gene complexes in the different species. The concept of homology in terms of similar genes handed on from a common ancestor has broken down.<sup>291</sup>

On closer examination, William Fix is saying that evolutionist claims regarding "pentadactylism homology" appeared in old textbooks, but that the claim was abandoned after molecular evidence emerged. But, unfortunately, some evolutionist sources still continue to put it forward as major evidence for evolution.

### **The Invalidity of Molecular Homology**

Evolutionists' advancement of homology as evidence for evolution is invalid not only at the morphological level, but also at the molecular level. Evolutionists say that the DNA codes, or the corresponding protein structures, of different living species are similar, and that this similarity is evidence that these living species have evolved from common ancestors, or else from each other. For example, it is regularly stated in the evolutionist literature that "there is a great similarity between the DNA of a human and that of an ape," and this similarity is presented as a proof for **the evolutionist claim that there is an evolutionary relationship between man and ape.**

We must make it clear from the start that it is no surprise that living creatures on the earth should possess very similar DNA structures. Living things' basic life processes are the same, and since human beings possess a living body, they cannot be expected to have a different DNA structure

to other creatures. Like other creatures, human beings develop by consuming carbohydrates, lipids, and proteins, oxygen circulates through the blood in their bodies, and energy is produced every second in each of their cells by the use of this oxygen.

For this reason, the fact that living things possess genetic similarities is no proof of the evolutionist claim that they evolved from a common ancestor. If evolutionists want to prove their theory of evolution from a common ancestor, then they have to show that creatures alleged to be each other's common ancestors have a direct line of descent in their molecular structures; in fact, however, as we shall shortly be examining, there have been no concrete discoveries showing any such thing.

Let us first of all take the matter of "the similarity between human and chimpanzee DNA." The latest studies on this issue have revealed that evolutionist propaganda about a "98 %" or "99 %" similarity between man and chimp is totally erroneous.

If a slightly wider study is made of this subject, it can be seen that the DNA of much more surprising creatures resembles that of man. One of these similarities is between man and worms of the nematode phylum. For example, genetic analyses published in *New Scientist* have revealed that **"nearly 75% of human genes have some counterpart in nematodes—millimeter-long soil-dwelling worms."**<sup>292</sup> This definitely does not mean that there is only a 25% difference between man and these worms! According to the family tree made by evolutionists, the *Chordata* phylum, in which man is included, and the *Nematoda* phylum were different to each other even 530 million years ago.

This situation clearly reveals that the similarity between the DNA strands of these two different categories of life is no evidence for the claim that these creatures evolved from a common ancestor.

In fact, when the results of DNA analyses from different species and classes are compared, it is seen that the sequences clearly do not agree with any evolutionist family tree. According to the evolutionist thesis, living things must have undergone a progressive increase in complexity, and, parallel to this, it is to be expected that the number of genes, which make up their genetic data, should also gradually increase. But the data obtained show that this thesis is the work of fantasy.

The Russian scientist Theodosius Dobzhansky, one of the best-known

# THE MYTH OF HUMAN-CHIMP SIMILARITY IS DEAD

**F**or a very long time, the evolutionist choir had been propagating the unsubstantiated thesis that there is very little genetic difference between humans and chimps. In every piece of evolutionist literature you could read sentences like "we are 99 percent equal to chimps" or "there is only 1 percent of DNA that makes us human." Although no conclusive comparison between human and chimp genomes has been made, Darwinist ideology led them to assume that there is very little difference between the two species.

A study in October 2002 revealed that the evolutionist propaganda on this issue, like many others, is completely false. Humans and chimps are not "99% similar" as the evolutionist fairy tale would have it. Genetic similarity turns out to be less than 95%. A news story reported by CNN.com, entitled "Humans, chimps more different than thought," reports the following:

There are more differences between a chimpanzee and a human being than once believed, according to a new genetic study.

Biologists have long held that the genes of chimps and humans are about 98.5 percent identical. But Roy Britten, a biologist at the California Institute of Technology, said in a study published this week that a new way of comparing the genes shows that the human and chimp genetic similarity is only about 95 percent.

Britten based this on a computer program that compared 780,000 of the 3 billion base pairs in the human DNA helix with those of the chimp. He found more mismatches than earlier researchers had, and concluded that at least 3.9 percent of the DNA bases were different.

This led him to conclude that there is a fundamental genetic difference between the species of about 5 percent.<sup>1</sup>

*New Scientist*, a leading science magazine and a strong supporter of Darwinism, reported the following on the same subject in an article titled "Human-chimp DNA difference trebled":

We are more unique than previously thought, according to new comparisons of human and chimpanzee DNA. It has long been held that we share 98.5 per cent of our genetic material with our closest relatives. That now appears to be wrong. In fact, we share less than 95 per cent of our genetic material, a three-fold increase in the variation between us and chimps.<sup>2</sup>

Biologist Roy Britten and other evolutionists continue to assess the result in terms of evolutionary theory, but in fact there is no scientific reason to do so. The theory of evolution is supported neither by the fossil record nor by genetic or biochemical data. On the contrary, the evidence shows that different life forms on Earth appeared quite abruptly without any evolutionary ancestors and that their complex systems prove the existence of an "intelligent design."

1. <http://www.cnn.com/2002/TECH/science/09/24/humans.chimps.ap/index.html>

2. <http://www.newscientist.com/news/news.jsp?id=ns99992833>

theoreticians of evolution, once stated that this irregular relationship between living things and their DNA is a great problem that evolution cannot explain:

More complex organisms generally have more DNA per cell than do simpler ones, but this rule has conspicuous exceptions. Man is nowhere near the top of the list, being exceeded by Amphiuma (an amphibian), Protopterus (a lungfish), and even ordinary frogs and toads. Why this should be so has long been a puzzle.<sup>293</sup>



**Comparisons of chromosome numbers and DNA structures show that there is no evolutionary relationship between different living species.**

Other comparisons on the molecular level produce other examples of inconsistency which render evolutionist views meaningless. When the **protein strands** of various living things are analysed in a laboratory, results emerge which are totally unexpected from the evolutionists' point of view, and some of which are utterly astounding. For example, the cytochrome-C protein in man differs by 14 amino acids from that in a horse, but by only eight from that in a kangaroo. When the same strand is examined, turtles appear closer to man than to a reptile such as the rattlesnake. When this situation is viewed from the evolutionist point of view, a meaningless result will emerge, such as that turtles are more closely related to man than they are to snakes.

For instance, chickens and sea snakes differ by 17 amino acids in 100 codons and horses and sharks by 16, which is a greater difference than that between dogs and worm flies, which belong to different phyla even, and which differ by only 15 amino acids.

Similar facts have been discovered with respect to hemoglobin. The hemoglobin protein found in human beings differs from that found in lemurs by 20 amino acids, but from that in pigs by only 14. The situation is more or less the same for other proteins.<sup>294</sup>

This being the case, evolutionists should arrive at the conclusion that, in evolutionary terms, man is more closely related to the kangaroo than to the horse, or to the pig than to the lemur. But these results conflict with all the "evolutionary family tree" plans that have so far been accepted. Protein similarities continue to produce astounding surprises. For example:

Adrian Friday and Martin Bishop of Cambridge have analyzed the available protein sequence data for tetrapods... To their surprise, in nearly all cases, **man (the mammal) and chicken (the bird) were paired off as closest relatives**, with the crocodile as next nearest relative...<sup>295</sup>

Again, when these similarities are approached from the point of view of evolutionist logic, they lead us to the ridiculous conclusion that man's closest evolutionary relative is the chicken. Paul Erbrich stresses the fact that molecular analyses produce results that show very different groups of living thing to be closely related in this way:

Proteins with nearly the same structure and function (homologous proteins) are found in increasing numbers in phylogenetically different, even very distinct taxa (e.g., hemoglobins in vertebrates, in some invertebrates, and even in certain plants).<sup>296</sup>

Dr. Christian Schwabe, a biochemical researcher from the University of South Carolina's Faculty of Medicine, is a scientist who spent years trying to find evidence for evolution in the molecular field. He first tried to establish evolutionary relationships between living things by carrying out studies on proteins such as insulin and relaxin. But Schwabe has several times been forced to admit that he has not been able to come by any evidence for evolution in his studies. He says the following in an article in *Science*:

Molecular evolution is about to be accepted as a method superior to paleontology for the discovery of evolutionary relationships. As a molecular evolutionist I should be elated. Instead **it seems disconcerting that many exceptions exist to the orderly progression of species** as determined by molecular homologies: so many in fact that I think the exception, the quirks, may carry the more important message.<sup>297</sup>

Schwabe's studies on relaxins produced rather interesting results:

Against this background of high variability between relaxins from purportedly closely related species, **the relaxins of pig and whale are all but**

## DARWINISM REFUTED



**identical.** The molecules derived from rats, guinea-pigs, man and pigs are as distant from each other (approximately 55%) as all are from the elasmobranch's relaxin. ...**Insulin, however, brings man and pig phylogenetically closer together** than chimpanzee and man.<sup>298</sup>

Schwabe was faced by the same realities when he compared the arrangements of other proteins besides insulin and relaxin. Schwabe has this to say about these other proteins that constitute exceptions to the orderly molecular development proposed by evolutionists:

The relaxin and insulin families do not stand alone as exceptions to the orderly interpretation of molecular evolution in conventional monophyletic terms. It is instructive to look at additional **examples of purportedly anomalous protein evolution** and note that the explanations permissible under the molecular clock theories cover a range of *ad hoc* explanations apparently limited only by imagination.<sup>299</sup>

Schwabe reveals that the comparison of the arrangement of lysosomes, cytochromes, and many hormones and amino acids show "unexpected results and anomalies" from the evolutionary point of view. Based on all this evidence, Schwabe maintains that all proteins had their

present forms right from the start, undergoing no evolution, and that no intermediate form has been found between molecules, in the same way as with fossils.

Concerning these findings in the field of molecular biology, Dr. Michael Denton comments:

Each class at a molecular level is unique, isolated and unlinked by intermediates. Thus, molecules, like fossils, have failed to provide the elusive intermediates so long sought by evolutionary biology... **At a molecular level, no organism is "ancestral" or "primitive" or "advanced" compared with its relatives...** There is little doubt that if this molecular evidence had been available a century ago... the idea of organic evolution might never have been accepted.<sup>300</sup>

### **The "Tree of Life" is Collapsing**

In the 1990s, research into the genetic codes of living things worsened the quandary faced by the theory of evolution in this regard. In these experiments, instead of the earlier comparisons that were limited to protein sequences, "ribosomal RNA" (rRNA) sequences were compared. From these findings, evolutionist scientists sought to establish an "evolutionary tree." However, they were disappointed by the results.

According to a 1999 article by French biologists Hervé Philippe and Patrick Forterre, "with more and more sequences available, it turned out that most protein phylogenies contradict each other as well as the rRNA tree."<sup>301</sup>

Besides rRNA comparisons, the DNA codes in the genes of living things were also compared, but the results have been the opposite of the "tree of life" presupposed by evolution. Molecular biologists James A. Lake, Ravi Jain and Maria C. Rivera elaborated on this in an article in 1999:

...[S]cientists started analyzing a variety of genes from different organisms and found that their relationship to each other contradicted the evolutionary tree of life derived from rRNA analysis alone.<sup>302</sup>

Neither the comparisons that have been made of proteins, nor those of rRNAs or of genes, confirm the premises of the theory of evolution. Carl Woese, a highly reputed biologist from the University of Illinois, admits that the concept of "phylogeny" has lost its meaning in the face of

molecular findings in this way:

No consistent organismal phylogeny has emerged from the many individual protein phylogenies so far produced. Phylogenetic incongruities can be seen everywhere in the universal tree, from its root to the major branchings within and among the various [groups] to the makeup of the primary groupings themselves.<sup>303</sup>

The fact that results of molecular comparisons are not in favor of, but rather opposed to, the theory of evolution is also admitted in an article called "Is it Time to Uproot the Tree of Life?" published in *Science* in 1999. This article by Elizabeth Pennisi states that the genetic analyses and comparisons carried out by Darwinist biologists in order to shed light on the "tree of life" actually yielded directly opposite results, and goes on to say that "new data are muddying the evolutionary picture":

A year ago, biologists looking over newly sequenced genomes from more than a dozen microorganisms thought these data might support the accepted plot lines of life's early history. But what they saw confounded them. Comparisons of the genomes then available not only didn't clarify the picture of how life's major groupings evolved, they confused it. And now, with an additional eight microbial sequences in hand, the situation has gotten even more confusing.... Many evolutionary biologists had thought they could roughly see the beginnings of life's three kingdoms... When full DNA sequences opened the way to comparing other kinds of genes, researchers expected that they would simply add detail to this tree. But "nothing could be further from the truth," says Claire Fraser, head of The Institute for Genomic Research (TIGR) in Rockville, Maryland. Instead, the comparisons have yielded many versions of the tree of life that differ from the rRNA tree and conflict with each other as well...<sup>304</sup>

In short, as molecular biology advances, the homology concept loses more ground. Comparisons that have been made of proteins, rRNAs and genes reveal that creatures which are allegedly close relatives according to the theory of evolution are actually totally distinct from each other. A 1996 study using 88 protein sequences grouped rabbits with primates instead of rodents; a 1998 analysis of 13 genes in 19 animal species placed sea urchins among the chordates; and another 1998 study based on 12 proteins put cows closer to whales than to horses.

As life is investigated on a molecular basis, the homology hypotheses



Comparisons that have been made of proteins, rRNA and genes reveal that creatures which are allegedly close relatives according to the theory of evolution are actually totally distinct from each other. Various studies grouped rabbits with primates instead of rodents, and cows with whales instead of horses.



of the evolutionary theory collapse one by one. Molecular biologist Jonathan Wells sums up the situation in 2000 in this way:

Inconsistencies among trees based on different molecules, and the bizarre trees that result from some molecular analyses, have now plunged molecular phylogeny into a crisis.<sup>305</sup>

But in that case what kind of scientific explanation can be given for similar structures in living things? The answer to that question was given before Darwin's theory of evolution came to dominate the world of science. Men of science such as Carl Linnaeus and Richard Owen, who first raised the question of similar organs in living creatures, saw these organs as examples of "**common design**." In other words, similar organs or similar genes resemble each other not because they have evolved by chance from a common ancestor, but because they have been designed deliberately to perform a particular function.

Modern scientific discoveries show that the claim that similarities in living things are due to descent from a "common ancestor" is not valid, and that the only rational explanation for such similarities is "common design."

# IMMUNITY, "VESTIGIAL ORGANS" AND EMBRYOLOGY

In the preceding sections, we examined the inconsistencies and difficulties the theory of evolution finds itself in in the fields of paleontology and molecular biology in the light of scientific proof and discoveries. In this chapter, we shall be considering some biological facts presented as evidence for the theory in evolutionist sources. In contrast to widespread belief, these facts show that there is actually no scientific discovery that supports the theory of evolution.

## **Bacterial Resistance to Antibiotics**

One of the biological concepts that evolutionists try to present as evidence for their theory is the resistance of bacteria to antibiotics. Many evolutionist sources mention antibiotic resistance as "an example of the development of living things by advantageous mutations." A similar claim is also made for the insects which build immunity to insecticides such as DDT.

However, evolutionists are mistaken on this subject too.

Antibiotics are "killer molecules" that are produced by microorganisms to fight other microorganisms. The first antibiotic was penicillin, discovered by Alexander Fleming in 1928. Fleming realized that mould produced a molecule that killed the *Staphylococcus* bacterium, and this discovery marked a turning point in the world of medicine. Antibiotics derived from microorganisms were used against bacteria and

the results were successful.

Soon, something new was discovered. Bacteria build immunity to antibiotics over time. The mechanism works like this: A large proportion of the bacteria that are subjected to antibiotics die, but some others, which are not affected by that antibiotic, replicate rapidly and soon make up the whole population. Thus, the entire population becomes immune to antibiotics.

Evolutionists try to present this as "the evolution of bacteria by adapting to conditions."

The truth, however, is very different from this superficial interpretation. One of the scientists who has done the most detailed research into this subject is the Israeli biophysicist Lee Spetner, who is also known for his book *Not by Chance* published in 1997. Spetner maintains that the immunity of bacteria comes about by two different mechanisms, but neither of them constitutes evidence for the theory of evolution. These two mechanisms are:

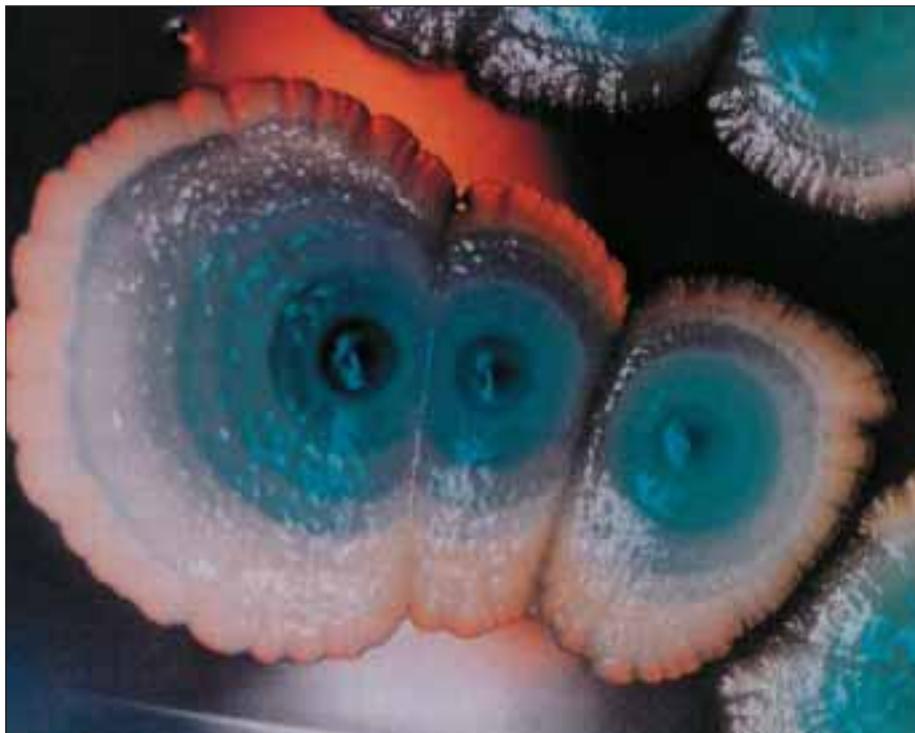
- 1) The transfer of resistance genes already extant in bacteria.
- 2) The building of resistance as a result of losing genetic data because of mutation.

Professor Spetner explains the first mechanism in an article published in 2001:

Some microorganisms are endowed with genes that grant resistance to these antibiotics. This resistance can take the form of degrading the antibiotic molecule or of ejecting it from the cell... [T]he organisms having these genes can transfer them to other bacteria making them resistant as well. Although the resistance mechanisms are specific to a particular antibiotic, most pathogenic bacteria have... succeeded in accumulating several sets of genes granting them resistance to a variety of antibiotics.<sup>306</sup>

Spetner then goes on to say that this is not "evidence for evolution":  
The acquisition of antibiotic resistance in this manner... is not the kind that can serve as a prototype for the mutations needed to account for Evolution... The genetic changes that could illustrate the theory must not only add information to the bacterium's genome, they must add new information to the biocosm. The horizontal transfer of genes only spreads around genes that are already in some species.<sup>307</sup>

So, we cannot talk of any evolution here, because no new genetic



**Bacteria quickly become immune to antibiotics by transferring their resistance genes to one another. The picture above shows a colony of *E. coli* bacteria.**

information is produced: genetic information that already exists is simply transferred between bacteria.

The second type of immunity, which comes about as a result of mutation, is not an example of evolution either. Spetner writes:

... [A] microorganism can sometimes acquire resistance to an antibiotic through a random substitution of a single nucleotide... Streptomycin, which was discovered by Selman Waksman and Albert Schatz and first reported in 1944, is an antibiotic against which bacteria can acquire resistance in this way. But although the mutation they undergo in the process is beneficial to the microorganism in the presence of streptomycin, it cannot serve as a prototype for the kind of mutations needed by NDT [Neo-Darwinian Theory]. The type of mutation that grants resistance to streptomycin is manifest in the ribosome and degrades its molecular match with the antibiotic molecule.<sup>308</sup>

In his book *Not by Chance*, Spetner likens this situation to the

disturbance of the key-lock relationship. Streptomycin, just like a key that perfectly fits in a lock, clutches on to the ribosome of a bacterium and inactivates it. Mutation, on the other hand, decomposes the ribosome, thus preventing streptomycin from holding on to the ribosome. Although this is interpreted as "bacteria developing immunity against streptomycin," this is not a benefit for the bacteria but rather a loss for it. Spetner writes:

This change in the surface of the microorganism's ribosome prevents the streptomycin molecule from attaching and carrying out its antibiotic function. It turns out that this degradation is a loss of specificity and therefore a loss of information. The main point is that Evolution... cannot be achieved by mutations of this sort, no matter how many of them there are. Evolution cannot be built by accumulating mutations that only degrade specificity.<sup>309</sup>

To sum up, a mutation impinging on a bacterium's ribosome makes that bacterium resistant to streptomycin. The reason for this is the "decomposition" of the ribosome by mutation. That is, no new genetic information is added to the bacterium. On the contrary, the structure of the ribosome is decomposed, that is to say, the bacterium becomes "disabled." (Also, it has been discovered that the ribosome of the mutated bacterium is less functional than that of a normal bacterium.) Since this "disability" prevents the antibiotic from attaching onto the ribosome, "antibiotic resistance" develops.

Finally, there is no example of mutation that "develops the genetic information." Evolutionists, who want to present antibiotic resistance as evidence for evolution, treat the issue in a very superficial way and are thus mistaken.

The same situation holds true for the immunity that insects develop to DDT and similar insecticides. In most of these instances, immunity genes that already exist are used. The evolutionary biologist Francisco Ayala admits this fact, saying, "The genetic variants required for resistance to the most diverse kinds of pesticides were apparently present in every one of the populations exposed to these man-made compounds."<sup>310</sup> Some other examples explained by mutation, just as with the ribosome mutation mentioned above, are phenomena that cause "genetic information deficit" in insects.

In this case, it cannot be claimed that the immunity mechanisms in

bacteria and insects constitute evidence for the theory of evolution. That is because the theory of evolution is based on the assertion that living things develop through mutations. However, Spetner explains that neither antibiotic immunity nor any other biological phenomena indicate such an example of mutation:

The mutations needed for macroevolution have never been observed. No random mutations that could represent the mutations required by Neo-Darwinian Theory that have been examined on the molecular level have added any information. The question I address is: Are the mutations that have been observed the kind the theory needs for support? The answer turns out to be NO!<sup>311</sup>

### **The Myth of Vestigial Organs**

For a long time, the concept of "vestigial organs" appeared frequently in evolutionist literature as "evidence" of evolution. Eventually, it was silently put to rest when this was proved to be invalid. But some evolutionists still believe in it, and from time to time someone will try to advance "vestigial organs" as important evidence of evolution.

The notion of "vestigial organs" was first put forward a century ago. As evolutionists would have it, there existed in the bodies of some creatures a number of non-functional organs. These had been inherited from progenitors and had gradually become vestigial from lack of use.

The whole assumption is quite unscientific, and is based entirely on insufficient knowledge. These "non-functional organs" were in fact organs whose "functions had not yet been discovered." The best indication of this was the gradual yet substantial decrease in evolutionists' long list of vestigial organs. S. R. Scadding, an evolutionist himself, concurred with this fact in his article "Can vestigial organs constitute evidence for evolution?" published in the journal *Evolutionary Theory*:

Since it is not possible to unambiguously identify useless structures, and since the structure of the argument used is not scientifically valid, I conclude that 'vestigial organs' provide no special evidence for the theory of evolution.<sup>3121</sup>

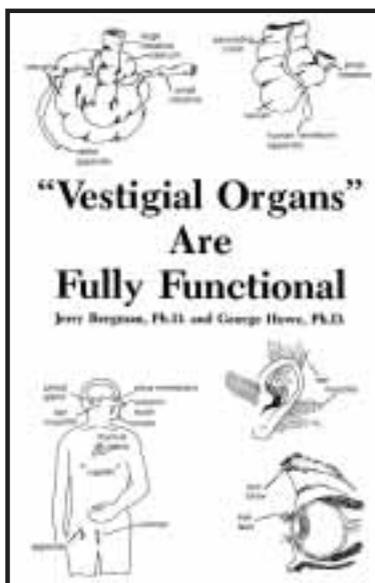
The list of vestigial organs that was made by the German Anatomist R. Wiedersheim in 1895 included approximately 100 organs, including the

appendix and coccyx. As science progressed, it was discovered that all of the organs in Wiedersheim's list in fact had very important functions. For instance, it was discovered that the appendix, which was supposed to be a "vestigial organ," was in fact a lymphoid organ that fought infections in the body. This fact was made clear in 1997:

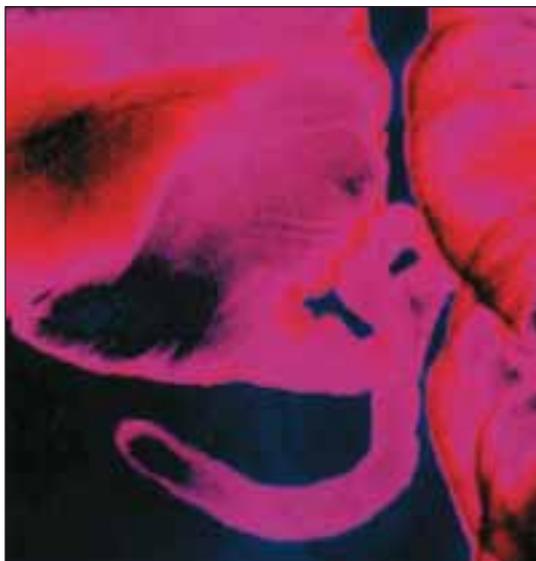
Other bodily organs and tissues—the thymus, liver, spleen, appendix, bone marrow, and small collections of lymphatic tissue such as the tonsils in the throat and Peyer's patch in the small intestine—are also part of the lymphatic system. They too help the body fight infection.<sup>313</sup>

It was also discovered that the tonsils, which were included in the same list of vestigial organs, had a significant role in protecting the throat against infections, particularly until adolescence. It was found that the coccyx at the lower end of the vertebral column supports the bones around the pelvis and is the convergence point of some small muscles and for this reason, it would not be possible to sit comfortably without a coccyx.

In the years that followed, it was realized that the thymus triggered the immune system in the human body by activating the T cells, that the pineal gland was in charge of the secretion of some important hormones such as melatonin, which inhibits secretion of luteinizing hormone, that the thyroid gland was effective in providing steady growth in babies and children and in metabolism and body activity, and that the pituitary gland controlled skeletal growth and the proper functioning of the thyroid, adrenals, and reproductive glands. All of these were once considered to be "vestigial organs." Finally, the semi-lunar fold in the eye, which was referred to as a vestigial organ by Darwin, has been found in fact to be in charge of cleansing and lubricating the eyeball.



**A scientific study of the myth of vestigial organs: "Vestigial Organs" Are Fully Functional.**



**The appendix (above), which evolutionists thought to be a vestigial organ, has now been understood to play an important part in the body's immune system. The coccyx at the lower end of the vertebral column is also not a vestigial organ but provides an attachment for our pelvic organs so that they will not collapse.**



There was a very important logical error in the evolutionist claim regarding vestigial organs. As we have just seen, this claim was that the vestigial organs in living things were inherited from their ancestors. However, some of the alleged "vestigial" organs are not found in the species alleged to be the ancestors of human beings! For example, the appendix does not exist in some ape species that are said to be ancestors of man. The famous biologist H. Enoch, who challenged the theory of vestigial organs, expressed this logical error as follows:

Apes possess an appendix, whereas their less immediate relatives, the lower apes, do not; but it appears again among the still lower mammals such as the opossum. How can the evolutionists account for this?<sup>314</sup>

Beside all of this, the claim that an organ which is not used atrophies and disappears over time carries a logical inconsistency within it. Darwin was aware of this inconsistency, and made the following confession in *The Origin of Species*:

There remains, however, this difficulty. After an organ has ceased being used, and has become in consequence much reduced, how can it be still further reduced in size until the merest vestige is left; and how can it be finally quite obliterated? It is scarcely possible that disuse can go on producing any further effect after the organ has once been rendered functionless. Some additional explanation is here requisite which I cannot give.<sup>315</sup>

Simply put, the scenario of vestigial organs put forward by evolutionists contains a number of serious logical flaws, and has in any case been proven to be scientifically untrue. There exists not one inherited vestigial organ in the human body.

## **Yet Another Blow To "Vestigial Organs":**

### **The Leg of the Horse**

The latest blow to the myth of vestigial organs comes from a recent study on the leg of the horse. In an article in the 20-27 December 2001 issue of the journal *Nature*, titled "Biomechanics: Damper for bad vibrations," it is noted that "Some muscle fibres in the legs of horses seem to be evolutionary leftovers with no function. But in fact they may act to damp damaging vibrations generated in the leg as the horse runs." The article reads as follows:

Horses and camels have muscles in their legs with tendons more than 600 millimetres long connected to muscle fibres less than 6 millimetres long. Such short muscles can change length only by a few millimetres as the animal moves, and seem unlikely to be of much use to large mammals. The tendons function as passive springs, and it has been assumed that the short muscle fibres are redundant, the remnants of longer fibres that have lost their function over the course of evolution. But Wilson and colleagues argue... that these fibres might protect bones and tendons from potentially damaging vibrations....

Their experiments show that short muscle fibers can damp the damaging vibrations following the impact of a foot on the ground. When the foot of a running animal hits the ground, the impact sets the leg vibrating; the frequency of the vibrations is relatively high—for example, 30–40 Hz in horses—so many cycles of vibration would occur while the foot was on the ground if there were no damping.

The vibrations might cause damage, because bone and tendon are susceptible to fatigue failure. Fatigue in bones and tendons is the accumulation of damage resulting from repeated application of stresses. Bone fatigue is responsible for the stress fractures suffered by both human athletes and racehorses, and tendon fatigue may explain at least some cases of tendonitis. Wilson *et al.* suggest that the very short muscle fibres protect both bones and tendons from fatigue damage by damping out vibrations...<sup>316</sup>

In short, a closer look at the anatomy of the horse revealed that the structures that have been considered as nonfunctional by evolutionists have very important functions.

In other words, scientific progress demonstrated that what was considered to be evidence for evolution is in fact evidence for design. Evolutionists should take a hint from this fact, if they are willing to do so. *The Nature* commentator seems to be reasonable:

Wilson *et al.* have found an important role for a muscle that seemed to be the relic of a structure that had lost its function in the course of evolution. Their work makes us wonder whether other vestiges (such as the human appendix) are as useless as they seem.<sup>317</sup>

This is not surprising. The more we learn about nature, the more we see the evidence for creation. As Michael Behe notes, "the conclusion of design comes not from what we do not know, but from what we have learned over the past 50 years."<sup>318</sup> And Darwinism turns out to be an argument from ignorance, or, in other words, an "atheism of the gaps."

### **The Recapitulation Misconception**

What used to be called the "recapitulation theory" has long been eliminated from scientific literature, but it is still being presented as a scientific reality by some evolutionist publications. The term "recapitulation" is a condensation of the dictum "ontogeny recapitulates phylogeny," put forward by the evolutionary biologist Ernst Haeckel at the end of the nineteenth century.

This theory of Haeckel's postulates that living embryos re-experience the evolutionary process that their pseudo-ancestors underwent. He theorized that during its development in its mother's womb, the human embryo first displayed the characteristics of a fish, and then those of a

reptile, and finally those of a human.

It has since been proven that this theory is completely bogus. It is now known that the "gills" that supposedly appear in the early stages of the human embryo are in fact the initial phases of the middle-ear canal, parathyroid, and thymus. That part of the embryo that was likened to the "egg yolk pouch" turns out to be a pouch that produces blood for the infant. The part that was identified as a "tail" by Haeckel and his followers is in fact the backbone, which resembles a tail only because it takes shape before the legs do.

These are universally acknowledged facts in the scientific world, and are accepted even by evolutionists themselves. Two leading neo-Darwinists, George Gaylord Simpson and W. Beck have admitted:

Haeckel misstated the evolutionary principle involved. It is now firmly established that ontogeny does not repeat phylogeny.<sup>319</sup>

The following was written in an article in *New Scientist* dated October 16, 1999:

[Haeckel] called this the **biogenetic law**, and the idea became popularly known as recapitulation. In fact Haeckel's strict law was soon shown to be



With his faked embryo drawings, Ernst Haeckel deceived the world of science for a century.

incorrect. For instance, **the early human embryo never has functioning gills like a fish, and never passes through stages that look like an adult reptile or monkey.**<sup>320</sup>

In an article published in *American Scientist*, we read:

Surely the biogenetic law is as dead as a doornail. It was finally exorcised from biology textbooks in the fifties. As a topic of serious theoretical inquiry it was extinct in the twenties...<sup>321</sup>

Another interesting aspect of "recapitulation" was Ernst Haeckel himself, a faker who falsified his drawings in order to support the theory he advanced. Haeckel's forgeries purported to show that fish and human embryos resembled one another. When he was caught out, the only defense he offered was that other evolutionists had committed similar offences:

After this compromising confession of 'forgery' I should be obliged to consider myself condemned and annihilated if I had not the consolation of seeing side by side with me in the prisoner's dock hundreds of fellow - culprits, among them many of the most trusted observers and most esteemed biologists. The great majority of all the diagrams in the best biological textbooks, treatises and journals would incur in the same degree the charge of 'forgery,' for all of them are inexact, and are more or less doctored, schematised and constructed.<sup>322</sup>

In the September 5, 1997, edition of the well-known scientific journal *Science*, an article was published revealing that Haeckel's embryo drawings were the product of a deception. The article, called "**Haeckel's Embryos: Fraud Rediscovered,**" had this to say:

The impression they [Haeckel's drawings] give,



Haeckel's fake drawings.



In its September 5, 1997, issue, the famous journal *Science* published an article revealing that Haeckel's embryo drawings had been falsified. The article described how the embryos were in fact very different from one another.



Observations in recent years have revealed that embryos of different species do not resemble each other, as Haeckel had attempted to show. The great differences between the mammal, reptile and bat embryos above are a clear instance of this.

that the embryos are exactly alike, is wrong, says Michael Richardson, an embryologist at St. George's Hospital Medical School in London... So he and his colleagues did their own comparative study, reexamining and photographing embryos roughly matched by species and age with those Haeckel drew. Lo and behold, **the embryos "often looked surprisingly different,"** Richardson reports in the August issue of *Anatomy and Embryology*.<sup>323</sup>

*Science* explained that, in order to be able to show the embryos as similar, Haeckel deliberately removed some organs from his drawings or else added imaginary ones. Later in this same article, the following information was revealed:

Not only did Haeckel add or omit features, Richardson and his colleagues report, but he also fudged the scale to exaggerate similarities among species, even when there were 10-fold differences in size. Haeckel further blurred differences by neglecting to name the species in most cases, as if one representative was accurate for an entire group of animals. In reality, Richardson and his colleagues note, **even closely related embryos such as those of fish vary quite a bit in their appearance and developmental pathway.** "It (Haeckel's drawings) looks like it's turning out to be **one of the most famous fakes in biology,**" Richardson concludes.<sup>324</sup>

The *Science* article goes on to discuss how Haeckel's confessions on this subject were covered up from the beginning of the last century, and how the fake drawings began to be presented in textbooks as scientific fact:

Haeckel's **confession got lost** after his drawings were subsequently used in a 1901 book called *Darwin and After Darwin* and reproduced widely in English language biology texts.<sup>325</sup>

In short, the fact that Haeckel's drawings were falsified had already emerged in 1901, but the whole world of science continued to be deceived by them for a century.

# THE ORIGIN OF PLANTS

Life on earth is divided into five (or sometimes six) kingdoms by scientists. We have so far concentrated mainly on the greatest kingdom, that of animals. In the preceding chapters, we considered the origin of life itself, studying proteins, genetic information, cell structure and bacteria, issues that are related with two other kingdoms, *Prokaryotae* and *Protista*. But at this point there is another important matter we need to concentrate on—the origin of the plant kingdom (*Plantae*).

We find the same picture in the origin of plants as we met when examining the origin of animals. Plants possess exceedingly complex structures, and it is not possible for these to come about by chance effects and for them to evolve into one another. The fossil record shows that the different classes of plants emerged all of a sudden in the world, each with its own particular characteristics, and with no period of evolution behind it.

## The Origin of the Plant Cell

Like animal cells, plant cells belong to the type known as "eukaryotic." The most distinctive feature of these is that they have a cell nucleus, and the DNA molecule in which their genetic information is encoded lies within this nucleus. On the other hand, some single-celled creatures such as bacteria have no cell nucleus, and the DNA molecule is free inside the cell. This second type of cell is called "prokaryotic." This type of cell structure, with free DNA unconfined within a nucleus, is an

ideal design for bacteria, as it makes possible the very important process—from the bacterial point of view—of plasmid transfer (that is, the transfer of DNA from cell to cell).

Because the theory of evolution is obliged to arrange living things in a sequence "from primitive to complex," it assumes that prokaryotic cells are primitive, and that eukaryotic cells evolved from them.

Before moving to the invalidity of this claim, it will be useful to demonstrate that prokaryotic cells are not at all "primitive." A bacterium possesses some 2,000 genes; each gene contains about 1,000 letters (links). This means that the information in a bacterium's DNA is some 2 million letters long. According to this calculation, the information in the DNA of one bacterium is equivalent to 20 novels, each of 100,000 words.<sup>326</sup> Any change in the information in the DNA code of a bacterium would be so deleterious as to ruin the bacterium's entire working system. As we have seen, a fault in a bacterium's genetic code means that the working system will go wrong—that is, the cell will die.

Alongside this sensitive structure, which defies chance changes, the fact that no "intermediate form" between bacteria and eukaryotic cells has been found makes the evolutionist claim unfounded. For example, the famous Turkish evolutionist Professor Ali Demirsoy confesses the groundlessness of the scenario that bacterial cells evolved into eukaryotic cells, and then into complex organisms made up of these cells:

One of the most difficult stages to be explained in evolution is to scientifically explain how organelles and complex cells developed from these primitive creatures. No transitional form has been found between these two forms. One- and multicelled creatures carry all this complicated structure, and no creature or group has yet been found with organelles of a simpler construction in any way, or which are more primitive. In other words, the organelles carried forward have developed just as they are. They have no simple and primitive forms.<sup>327</sup>

One wonders, what is it that encourages Professor Ali Demirsoy, a loyal adherent of the theory of evolution, to make such an open admission? The answer to this question can be given quite clearly when the great structural differences between bacteria and plant cells are examined.

These are:

1- While the walls of bacterial cells are formed of polysaccharide and

protein, the walls of plant cells are formed of cellulose, a totally different structure.

2- While plant cells possess many organelles, covered in membranes and possessing very complex structures, bacterial cells lack typical organelles. In bacterial cells there are just freely moving tiny ribosomes. But the ribosomes in plant cells are larger and are attached to the cell membrane. Furthermore, protein synthesis takes place by different means in the two types of ribosomes.

3- The DNA structures in plant and bacterial cells are different.

4- The DNA molecule in plant cells is protected by a double-layered membrane, whereas the DNA in bacterial cells stands free within the cell.

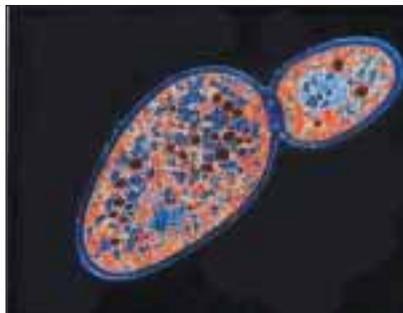
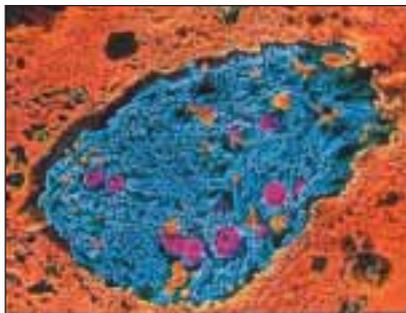
5- The DNA molecule in bacterial cells resembles a closed loop; in other words, it is circular. In plants, the DNA molecule is linear.

6- The DNA molecule in bacterial cells carries information belonging to just one cell, but in plant cells the DNA molecule carries information about the whole plant. For example, all the information about a fruit-bearing tree's roots, stem, leaves, flowers, and fruit are all found separately in the DNA in the nucleus of just one cell.

7- Some species of bacteria are photosynthetic, in other words, they carry out photosynthesis. But unlike plants, in photosynthetic bacteria

**Plants form the fundamental basis of life on earth. They are an indispensable condition for life, as they provide food and release oxygen to the air.**





**The evolutionist hypothesis that prokaryotic cells (left) turned into eukaryotic cells over time has no scientific basis to it.**

(*cyanobacteria*, for instance), there is no chloroplast containing chlorophyll and photosynthetic pigments. Rather, these molecules are buried in various membranes all over the cell.

8- The biochemistry of messenger RNA formation in prokaryotic (bacterial) cells and in eukaryotic (including plant and animal) cells are quite different from one another.<sup>328</sup>

Messenger RNA plays a vital role for the cell to live. But although messenger RNA assumes the same vital role in both prokaryotic cells and in eukaryotic cells, their biochemical structures are different. J. Darnell wrote the following in an article published in *Science*:

The differences in the biochemistry of messenger RNA formation in eukaryotes compared to prokaryotes are so profound as to suggest that sequential prokaryotic to eukaryotic cell evolution seems unlikely.<sup>329</sup>

The structural differences between bacterial and plant cells, of which we have seen a few examples above, lead evolutionist scientists to another dead-end. Although plant and bacterial cells have some aspects in common, most of their structures are quite different from one another. In fact, since there are no membrane-surrounded organelles or a cytoskeleton (the internal network of protein filaments and microtubules) in bacterial cells, the presence of several very complex organelles and cell organization in plant cells totally invalidates the claim that the plant cell evolved from the bacterial cell.

Biologist Ali Demirsoy openly admits this, saying, "Complex cells never developed from primitive cells by a process of evolution."<sup>330</sup>

## **The Endosymbiosis Hypothesis and Its Invalidity**

The impossibility of plant cells' having evolved from a bacterial cell has not prevented evolutionary biologists from producing speculative hypotheses. But experiments disprove these.<sup>331</sup> The most popular of these is the "endosymbiosis" hypothesis.

This hypothesis was put forward by Lynn Margulis in 1970 in her book *The Origin of Eukaryotic Cells*. In this book, Margulis claimed that as a result of their communal and parasitic lives, bacterial cells turned into plant and animal cells. According to this theory, plant cells emerged when a photosynthetic bacterium was swallowed by another bacterial cell. The photosynthetic bacterium evolved inside the parent cell into a chloroplast. Lastly, organelles with highly complex structures such as the nucleus, the Golgi apparatus, the endoplasmic reticulum, and ribosomes evolved, in some way or other. Thus, the plant cell was born.

As we have seen, this thesis of the evolutionists is nothing but a work of fantasy. Unsurprisingly, it was criticized by scientists who carried out very important research into the subject on a number of grounds: We can cite D. Lloyd<sup>332</sup>, M. Gray and W. Doolittle<sup>333</sup>, and R. Raff and H. Mahler as examples of these.

The endosymbiosis hypothesis is based on the fact that the mitochondria of animal cells and the chloroplasts of plant cells contain their own DNA, separate from the DNA in the nucleus of the parent cell. So, on this basis, it is suggested that mitochondria and chloroplasts were once independent, free-living cells. However, when chloroplasts are studied in detail, it can be seen that this claim is inconsistent.

A number of points invalidate the endosymbiosis hypothesis:

1- If chloroplasts, in particular, were once independent cells, then there could only have been one outcome if one were swallowed by a larger cell: namely, it would have been digested by the parent cell and used as food. This must be so, because even if we assume that the parent cell in question took such a cell into itself from the outside by mistake, instead of intentionally ingesting it as food, nevertheless, the digestive enzymes in the parent cell would have destroyed it. Of course, some evolutionists have gotten around this obstacle by saying, "The digestive enzymes had disappeared." But this is a clear contradiction, because if the cell's digestive enzymes had disappeared, then the cell would have died from lack of nutrition.

2- Again, let us assume that all the impossible happened and that the cell which is claimed to have been the ancestor of the chloroplast was swallowed by the parent cell. In this case we are faced with another problem: The blueprints of all the organelles inside the cell are encoded in the DNA. If the parent cell were going to use other cells it swallowed as organelles, then it would be necessary for all of the information about them to be already present and encoded in its DNA. The DNA of the swallowed cells would have to possess information belonging to the parent cell. Not only is such a situation impossible, the two complements of DNA belonging to the parent cell and the swallowed cell would also have to become compatible with each other afterwards, which is also clearly impossible.

3- There is great harmony within the cell which random mutations cannot account for. There are more than just one chloroplast and one mitochondrion in a cell. Their number rises or falls according to the activity level of the cell, just like with other organelles. The existence of DNA in the bodies of these organelles is also of use in reproduction. As the cell divides, all of the numerous chloroplasts divide too, and the cell division happens in a shorter time and more regularly.

4- Chloroplasts are energy generators of absolutely vital importance to the plant cell. If these organelles did not produce energy, many of the cell's functions would not work, which would mean that the cell could not live. These functions, which are so important to the cell, take place with proteins synthesized in the chloroplasts. But the chloroplasts' own DNA is not enough to synthesize these proteins. The greater part of the proteins are synthesized using the parent DNA in the cell nucleus.<sup>334</sup>

While the situation envisioned by the endosymbiosis hypothesis is occurring through a process of trial and error, what effects would this have on the DNA of the parent cell? As we have seen, any change in a DNA molecule definitely does not result in a gain for that organism; on the contrary, any such mutation would certainly be harmful. In his book *The Roots of Life*, Mahlon B. Hoagland explains the situation:

You'll recall we learned that almost always a change in an organism's DNA is detrimental to it; that is, it leads to a reduced capacity to survive. By way of analogy, random additions of sentences to the plays of Shakespeare are not likely to improve them! ...The principle that DNA changes are harmful by

virtue of reducing survival chances applies whether a change in DNA is caused by a mutation or by some foreign genes we deliberately add to it.<sup>335</sup>

The claims put forward by evolutionists are not based on scientific experiments, because no such thing as one bacterium swallowing another one has ever been observed. In his review of a later book by Margulis, *Symbiosis in Cell Evolution*, molecular biologist P. Whitfield describes the situation:

Prokaryotic endocytosis is the cellular mechanism on which the whole of S.E.T. (Serial Endosymbiotic Theory) presumably rests. If one prokaryote could not engulf another it is difficult to imagine how endosymbioses could be set up. Unfortunately for Margulis and S.E.T., no modern examples of prokaryotic endocytosis or endosymbiosis exist...<sup>336</sup>

## **The Origin of Photosynthesis**

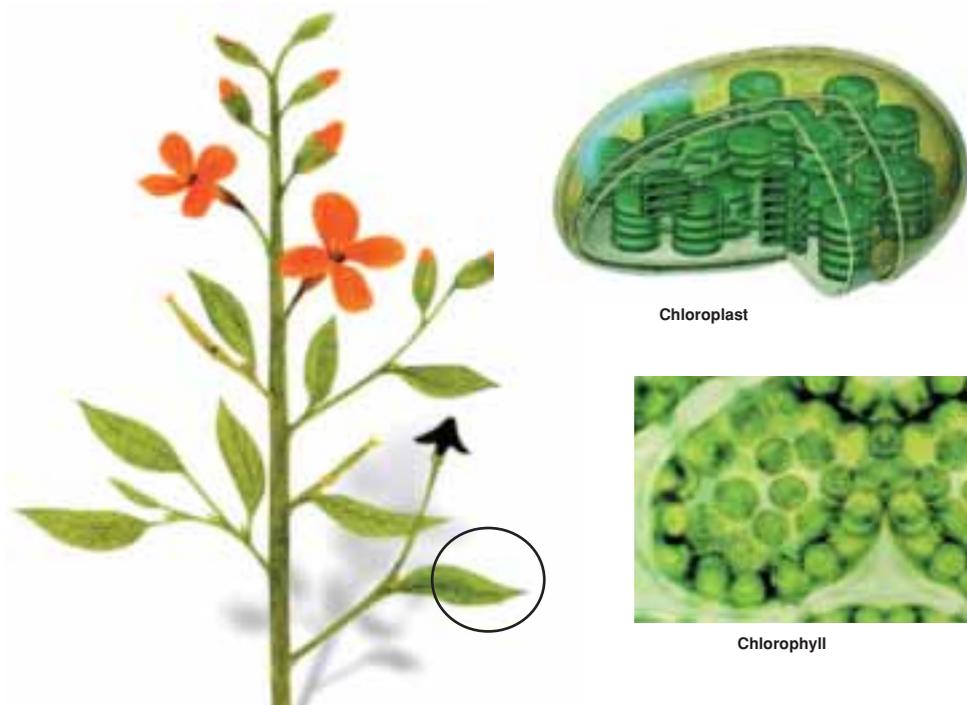
Another matter regarding the origin of plants which puts the theory of evolution into a terrible quandary is the question of how plant cells began to carry out photosynthesis.

Photosynthesis is one of the fundamental processes of life on earth. Thanks to the chloroplasts inside them, plant cells produce starch by using water, carbon dioxide and sunlight. Animals are unable to produce their own nutrients and must use the starch from plants for food instead. For this reason, photosynthesis is a basic condition for complex life. An even more interesting side of the matter is the fact that this complex process of photosynthesis has not yet been fully understood. Modern technology has not yet been able to reveal all of its details, let alone reproduce it.

Is it possible for such a complex process as photosynthesis to be the product of natural processes, as the theory of evolution holds?

According to the evolution scenario, in order to carry out photosynthesis, plant cells swallowed bacterial cells which could photosynthesize and turned them into chloroplasts. So, how did bacteria learn to carry out such a complicated process as photosynthesis? And why had they not begun to carry out such a process before then? As with other questions, the scenario has no scientific answer to give. Have a look at how an evolutionist publication answers the question:

The heterotroph hypothesis suggests that the earliest organisms were



Chloroplast

Chlorophyll

Plant cells carry out a process that no modern laboratory can duplicate—photosynthesis. Thanks to the organelle called the "chloroplast" in the plant cell, plants use water, carbon dioxide and sunlight to create starch. This food product is the first step in the earth's food chain, and the source of food for all its inhabitants. The details of this exceedingly complex process are still not fully understood today.

heterotrophs that fed on a soup of organic molecules in the primitive ocean. As these first heterotrophs consumed the available amino acids, proteins, fats, and sugars, the nutrient soup became depleted and could no longer support a growing population of heterotrophs. ...Organisms that could use an alternate source of energy would have had a great advantage. Consider that Earth was (and continues to be) flooded with solar energy that actually consists of different forms of radiation. Ultraviolet radiation is destructive, but visible light is energy-rich and undestructive. Thus, as organic compounds became increasingly rare, an already-present ability to use visible light as an alternate source of energy might have enabled such organisms and their descendents to survive.<sup>337</sup>

The book *Life on Earth*, another evolutionist source, tries to explain the emergence of photosynthesis:

The bacteria fed initially on the various carbon compounds that had taken so

many millions of years to accumulate in the primordial seas. But as they flourished, so this food must have become scarcer. Any bacterium that could tap a different source of food would obviously be very successful and eventually some did. Instead of taking ready-made food from their surroundings, they began to manufacture their own within their cell walls, drawing the necessary energy from the sun.<sup>338</sup>

In short, evolutionist sources say that photosynthesis was in some way coincidentally "discovered" by bacteria, even though man, with all his technology and knowledge, has been unable to do so. These accounts, which are no better than fairy tales, have no scientific worth. Those who study the subject in a bit more depth will accept that photosynthesis is a major dilemma for evolution. Professor Ali Demirsoy makes the following admission, for instance:

Photosynthesis is a rather complicated event, and it seems impossible for it to emerge in an organelle inside a cell (because it is impossible for all the stages to have come about at once, and it is meaningless for them to have emerged separately).<sup>339</sup>

The German biologist Hoimar von Ditfurth says that photosynthesis is a process that cannot possibly be learned:

No cell possesses the capacity to 'learn' a process in the true sense of the word. It is impossible for any cell to come by the ability to carry out such functions as respiration or photosynthesis, neither when it first comes into being, nor later in life.<sup>340</sup>

Since photosynthesis cannot develop as the result of chance, and cannot subsequently be learned by a cell, it appears that the first plant cells that lived on the earth were specially designed to carry out photosynthesis. In other words, plants were created with the ability to photosynthesize.

## **The Origin of Algae**

The theory of evolution hypothesizes that single-celled plant-like creatures, whose origins it is unable to explain, came in time to form algae. The origin of algae goes back to very remote times. So much so, that fossil algae remains from 3.1 to 3.4 million years old have been found. The interesting thing is that there is no structural difference between these

extraordinarily ancient living things and specimens living in our own time. An article published in *Science News* says:

Both blue-green algae and bacteria fossils dating back 3.4 billion years have been found in rocks from S. Africa. Even more intriguing, the pleurocapsalean algae turned out to be almost identical to modern pleurocapsalean algae at the family and possibly even at the generic level.<sup>341</sup>

The German biologist Hoimar von Ditfurth makes this comment on the complex structure of so-called "primitive" algae:

The oldest fossils so far discovered are objects fossilized in minerals which belong to blue green algae, more than 3 billion years old. No matter how primitive they are, they still represent rather complicated and expertly organized forms of life.<sup>342</sup>



Free-swimming algae in the ocean.

Evolutionary biologists consider that the algae in question gave rise over time to other marine plants and moved to the land some 450 million years ago. However, just like the scenario of animals moving from water onto the land, the idea that plants moved from water to the land is another fantasy. Both scenarios are invalid and inconsistent. Evolutionist sources usually try to gloss over the subject with such fantastical and unscientific comments as

"algae in some way moved onto the land and adapted to it." But there are a large number of obstacles that make this transition quite impossible. Let us have a short look at the most important of them.

**1- The danger of drying out:** For a plant which lives in water to be able to live on land, its surface has first of all to be protected from water loss. Otherwise the plant will dry out. Land plants are provided with special systems to prevent this from happening. There are very important details in these systems. For example, this protection must happen in such a way that important gases such as oxygen and carbon dioxide are able to leave and enter the plant freely. At the same time, it is important that evaporation be prevented. If a plant does not possess such a system, it cannot wait millions of years to develop one. In such a situation, the plant

will soon dry up and die.

**2- Feeding:** Marine plants take the water and minerals they need directly from the water they are in. For this reason, any algae which tried to live on land would have a food problem. They could not live without resolving it.

**3- Reproduction:** Algae, with their short life span, have no chance of reproducing on land, because, as in all their functions, algae also use water to disperse their reproductive cells. In order to be able to reproduce on land, they would need to possess multicellular reproductive cells like those of land plants, which are covered by a protective layer of cells. Lacking these, any algae which found themselves on land would be unable to protect their reproductive cells from danger.

**4- Protection from oxygen:** Any algae which arrived on land would have taken in oxygen in a decomposed form up until that point. According to the evolutionists' scenario, now they would have to take in oxygen in a form they had never encountered before, in other words, directly from the atmosphere. As we know, under normal conditions the oxygen in the atmosphere has a poisoning effect on organic substances. Living things which live on land possess systems which stop them being harmed by it. But algae are marine plants, which means they do not possess the enzymes to protect them from the harmful effects of oxygen. So, as soon as they arrived on land, it would be impossible for them to avoid these effects. Neither is there any question of their waiting for such a system to develop, because they could not survive on land long enough for that to happen.

There is yet another reason why the claim that algae moved from the ocean to the land inconsistent—namely, the absence of a natural agent to make such a transition necessary. Let us imagine the natural environment of algae 450 million years ago. The waters of the sea offer them an ideal environment. For instance, the water isolates and protects them from extreme heat, and offers them all kinds of minerals they need. And, at the same time, they can absorb the sunlight by means of photosynthesis and make their own carbohydrates (sugar and starch) by carbon dioxide, which dissolves in the water. For this reason, there is nothing the algae lack in the ocean, and therefore no reason for them to move to the land, where there is no "selective advantage" for them, as the evolutionists put it.



This 300-million-year-old plant from the late Carboniferous is no different from specimens growing today.



This plant from the Jurassic Age, some 180 million years old, emerged with its own unique structure, and with no ancestor preceding it.



This 140-million-year-old fossil from the species *Archaeofructus* is the oldest known fossil angiosperm (flowering plant). It possesses the same body, flower and fruit structure as similar plants alive today.

All of this shows that the evolutionist hypothesis that algae emerged onto the land and formed land plants is completely unscientific.

## **The Origin of Angiosperms**

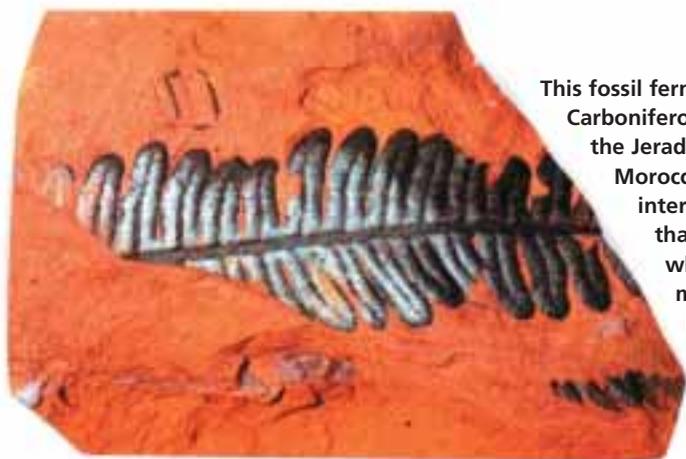
When we examine the fossil history and structural features of plants that live on land, another picture emerges which fails to agree with evolutionist predictions. There is no fossil series to confirm even one branch of the "evolutionary tree" of plants that you will see in almost any biological textbook. Most plants possess abundant remains in the fossil record, but none of these fossils is an intermediate form between one species and another. They are all specially and originally created as completely distinct species, and there are no evolutionary links between them. As the evolutionary paleontologist E. C. Olson accepted, "Many new groups of plants and animals suddenly appear, apparently without any close ancestors."<sup>343</sup>

The botanist Chester A. Arnold, who studies fossil plants at the University of Michigan, makes the following comment:

It has long been hoped that extinct plants will ultimately reveal some of the stages through which existing groups have passed during the course of their development, but it must be freely admitted that this aspiration has been fulfilled to a very slight extent, even though paleobotanical research has been in progress for more than one hundred years.<sup>344</sup>

Arnold accepts that paleobotany (the science of plant fossils) has produced no results in support of evolution: "[W]e have not been able to track the phylogenetic history of a single group of modern plants from its beginning to the present."<sup>345</sup>

The fossil discoveries which most clearly deny the claims of plant evolution are those of flowering plants, or "angiosperms," to give them their scientific name. These plants are divided into 43 separate families, each one of which emerges suddenly, leaving no trace of any primitive "transitional form" behind it in the fossil record. This was realized in the nineteenth century, and for this reason Darwin described the origin of angiosperms as "**an abominable mystery.**" All the research carried out since Darwin's time has simply added to the amount of discomfort this mystery causes. In his book *The Paleobiology of Angiosperm Origins*, the



**This fossil fern from the Carboniferous was found in the Jerada region of Morocco. The interesting thing is that this fossil, which is 320 million years old, is identical to present-day ferns.**

evolutionary paleobotanist N. F. Hughes makes this admission:

... With few exceptions of detail, however, the failure to find a satisfactory explanation has persisted, and many botanists have concluded that the problem is not capable of solution, by use of fossil evidence.<sup>346</sup>

In his book *The Evolution of Flowering Plants*, Daniel Axelrod says this about the origin of flowering plants,

The ancestral group that gave rise to angiosperms has not yet been identified in the fossil record, and no living angiosperm points to such an ancestral alliance.<sup>347</sup>

All this leads us to just one conclusion: Like all living things, plants were also created. From the moment they first emerged, all their mechanisms have existed in a finished and complete form. Terms such as 'development over time,' "changes dependent on coincidences," and "adaptations which emerged as a result of need," which one finds in the evolutionist literature, have no truth in them at all and are scientifically meaningless.



# IRREDUCIBLE COMPLEXITY

One of the most important concepts that one must employ when questioning Darwinist theory in the light of scientific discoveries is without a doubt the criterion that Darwin himself employed. In *The Origin of Species*, Darwin put forward a number of concrete criteria suggesting how his theory might be tested and, if found wanting, disproved. Many passages in his book begin, "If my theory be true," and in these Darwin describes the discoveries his theory requires. One of the most important of these criteria concerns fossils and "transitional forms." In earlier chapters, we examined how these prophecies of Darwin's did not come true, and how, on the contrary, the fossil record completely contradicts Darwinism.

In addition to these, Darwin gave us another very important criterion by which to test his theory. This criterion is so important, Darwin wrote, that it could cause his theory to be absolutely broken down:

**If it could be demonstrated that any complex organ existed, which could not possibly have been formed by numerous, successive, slight modifications, my theory would absolutely break down. But I can find out no such case.** <sup>348</sup>

We must examine Darwin's intention here very carefully. As we know, Darwinism explains the origin of life with two unconscious natural mechanisms: natural selection and random changes (in other words, mutations). According to Darwinist theory, these two mechanisms led to the emergence of the complex structure of living cells, as well as the anatomical systems of complex living things, such as eyes, ears, wings, lungs, bat sonar and millions of other complex system designs.

However, how is it that these systems, which possess incredibly

complicated structures, can be considered the products of two unconscious natural effects? At this point, the concept Darwinism applies is that of "reducibility." It is claimed that these systems can be reduced to very basic states, and that they may have then developed by stages. Each stage gives a living thing a little more advantage, and is therefore chosen by natural selection. Then, later, there will be another small, chance development, and that too will be preferred because it affords an advantage, and the process will go on in this way. Thanks to this, according to the Darwinist claim, a species which originally possessed no eyes will come to possess perfect ones, and another species which was formerly unable to fly, will grow wings and be able to do so.

This story is explained in a very convincing and reasonable manner in evolutionist sources. But when one goes into it in a bit more detail, a great error appears. The first aspect of this error is a subject we have already studied in earlier pages of this book: Mutations are destructive, not constructive. In other words, chance mutations that occur in living creatures do not provide them any "advantages," and, furthermore, the idea that they could do this thousands of times, one after the other, is a dream that contradicts all scientific observations.

But there is yet another very important aspect to the error. Darwinist theory requires all the stages from one point to another to be individually "advantageous." In an evolutionary process from A to Z (for instance, from a wingless creature to a winged one), all the "intermediate" stages B, C, D, ...V, W, X, and Y along the way have to provide advantages for the living thing in question. Since it is not possible for natural selection and mutation to consciously pick out their targets in advance, the whole theory is based on the hypothesis that living systems can be reduced to discrete traits that can be added on to the organism in small steps, each of which carries some selective advantage. That is why Darwin said, "If it could be demonstrated that any complex organ existed, which could not possibly have been formed by numerous, successive, slight modifications, my theory would absolutely break down."

Given the primitive level of science in the nineteenth century, Darwin may have thought that living things possess a reducible structure. But twentieth century discoveries have shown that many systems and organs in living things cannot be reduced to simplicity. This fact, known as

"irreducible complexity," definitively destroys Darwinism, just as Darwin himself feared.

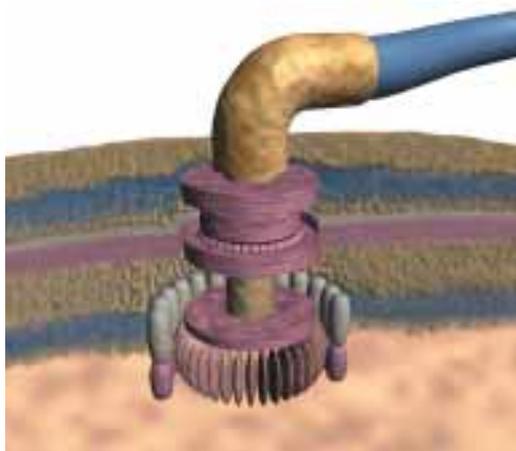
## **The Bacterial Flagellum**

The most important person to bring the concept of irreducible complexity to the forefront of the scientific agenda is the biochemist Michael J. Behe of Lehigh University in the United States. In his book *Darwin's Black Box: The Biochemical Challenge to Evolution*, published in 1996, Behe examines the irreducibly complex structure of the cell and a number of other biochemical structures, and reveals that it is impossible to account for these by evolution. According to Behe, the real explanation of life is intelligent design.

Behe's book was a serious blow to Darwinism. In fact, Peter van Inwagen, Professor of Philosophy at the University of Notre Dame, stresses the importance of the book in this manner:

If Darwinians respond to this important book by ignoring it, misrepresenting it, or ridiculing it, that will be evidence in favor of the widespread suspicion that Darwinism today functions more as an ideology than as a scientific theory. If they can successfully answer Behe's arguments, that will be important evidence in favor of Darwinism.<sup>349</sup>

One of the interesting examples of irreducible complexity that Behe gives in his book is the bacterial flagellum. This is a whip-like organ that is used by some bacteria to move about in a liquid environment. This



**An electric motor—but not one in a household appliance or vehicle. This one is in a bacterium. Thanks to this motor, bacteria have been able to move those organs known as "flagella" and thus swim in water. This was discovered in the 1970s, and astounded the world of science, because this "irreducibly complex" organ, made up of some 240 distinct proteins, cannot be explained by chance mechanisms as Darwin had proposed.**

organ is embedded in the cell membrane, and enables the bacterium to move in a chosen direction at a particular speed.

Scientists have known about the flagellum for some time. However, its structural details, which have only emerged over the last decade or so, have come as a great surprise to them. It has been discovered that the flagellum moves by means of a very complicated "organic motor," and not by a simple vibratory mechanism as was earlier believed. This propeller-like engine is constructed on the same mechanical principles as an electric motor. There are two main parts to it: a moving part (the "rotor") and a stationary one (the "stator").

The bacterial flagellum is different from all other organic systems that produce mechanical motion. The cell does not utilize available energy stored as ATP molecules. Instead, it has a special energy source: Bacteria use energy from the flow of ions across their outer cell membranes. The inner structure of the motor is extremely complex. Approximately 240 distinct proteins go into constructing the flagellum. Each one of these is carefully positioned. Scientists have determined that these proteins carry the signals to turn the motor on or off, form joints to facilitate movements at the atomic scale, and activate other proteins that connect the flagellum to the cell membrane. The models constructed to summarize the working of the system are enough to depict the complicated nature of the system.

The complicated structure of the bacterial flagellum is sufficient all by itself to demolish the theory of evolution, since the flagellum has an irreducibly complex structure. If one single molecule in this fabulously complex structure were to disappear, or become defective, the flagellum would neither work nor be of any use to the bacterium. The flagellum must have been working perfectly from the first moment of its existence. This fact again reveals the nonsense in the theory of evolution's assertion of "step by step development." In fact, not one evolutionary biologist has so far succeeded in explaining the origin of the bacterial flagellum although a few tried to do so.

The bacterial flagellum is clear evidence that even in supposedly "primitive" creatures there is an extraordinary design. As humanity learns more about the details, it becomes increasingly obvious that the organisms considered to be the simplest by the scientists of nineteenth century, including Darwin, are in fact just as complex as any others.

## **The Design of the Human Eye**

The human eye is a very complicated system consisting of the delicate conjunction of some 40 separate components. Let us consider just one of these components: for example, the lens. We do not usually realize it, but the thing that enables us to see things clearly is the constant automatic focusing of the lens. If you wish, you can carry out a small experiment on this subject: Hold your index finger up in the air. Then look at the tip of your finger, then at the wall behind it. Every time you look from your finger to the wall you will feel an adjustment.

This adjustment is made by small muscles around the lens. Every time we look at something, these muscles go into action and enable us to see what we are looking at clearly by changing the thickness of the lens and turning it at the right angle to the light. The lens carries out this adjustment every second of our lives, and makes no mistakes. Photographers make the same adjustments in their cameras by hand, and sometimes have to struggle for quite some time to get the right focus. Within the last 10 to 15 years, modern technology has produced cameras which focus automatically, but no camera can focus as quickly and as well as the eye.

For an eye to be able to see, the 40 or so basic components which make it up need to be present at the same time and work together perfectly. The lens is only one of these. If all the other components, such as the cornea, iris, pupil, retina, and eye muscles, are all present and functioning properly, but just the eyelid is missing, then the eye will shortly incur serious damage and cease to carry out its function. In the same way, if all the subsystems exist but tear production ceases, then the eye will dry up and go blind within a few hours.

The theory of evolution's claim of "reducibility" loses all meaning in the face of the complicated structure of the eye. The reason is that, in order for the eye to function, all its parts need to be present at the same time. It is impossible, of course, for the mechanisms of natural selection and mutation to give rise to the eye's dozens of different subsystems when they can confer no advantage right up until the last stage. Professor Ali Demirsoy accepts the truth of this in these words:

It is rather hard to reply to a third objection. How was it possible for a complicated organ to come about suddenly even though it brought benefits



The human eye works by some 40 different parts functioning together. If just one of these is not present, the eye will serve no purpose. Each of these 40 parts has its own individual complex structure. For instance, the retina, at the back of the eye, is made up of 11 strata (above right), each of which has a different function. The theory of evolution is unable to account for the development of such a complex organ.

with it? For instance, how did the lens, retina, optic nerve, and all the other parts in vertebrates that play a role in seeing suddenly come about? Because natural selection cannot choose separately between the visual nerve and the retina. The emergence of the lens has no meaning in the absence of a retina. **The simultaneous development of all the structures for sight is unavoidable.** Since parts that develop separately cannot be used, they will both be meaningless, and also perhaps disappear with time. At the same time, their development all together **requires the coming together of unimaginably small probabilities.**<sup>350</sup>

What Professor Demirsoy really means by "unimaginably small probabilities" is basically an "impossibility." It is clearly an impossibility for the eye to be the product of chance. Darwin also had a great difficulty in the face of this, and in a letter he even admitted, "I remember well the time when the thought of the eye made me cold all over."<sup>351</sup>

In *The Origin of Species*, Darwin experienced a serious difficulty in the face of the eye's complex design. The only solution he found was in pointing to the simpler eye structure found in some creatures as the origin of the more complex eyes found in others. He hypothesized that more complex eyes evolved from simpler ones. However, this claim does not reflect the truth. Paleontology shows that living things emerged in the world with their exceedingly complex structures already intact. The oldest

known system of sight is the trilobite eye. This 530-million-year-old compound eye structure, which we touched on in an earlier chapter, is an "optical marvel" which worked with a double lens system. This fact totally invalidates Darwin's assumption that complex eyes evolved from "primitive" eyes.

### **The Irreducible Structure of the "Primitive" Eye**

It remains to be said that the organs described by Darwin as "primitive" eyes actually possess a complex and irreducible structure that can never be explained by chance. Even in its simplest form, for seeing to happen, some of a creature's cells need to become light-sensitive—that is, they need to possess the ability to transduce this sensitivity to light into electrical signals; a nerve network from these cells to the brain needs to emerge; and a visual center in the brain to evaluate the information has to be formed. It is senseless to propose that all of these things came about by chance, at the same time, and in the same living thing. In his book *Evrım Kuramı ve Bagnazlık* (The Theory of Evolution and Bigotry), which he wrote to defend the theory of evolution, the evolutionist writer Cemal Yildirim admits this fact in this way:

A large number of mechanisms need to work together for sight: As well as the eye and the mechanisms inside it, we can mention the links between special centers in the brain and the eye. How did this complex system-creation come about? According to biologists, the first step in the emergence of the eye during the evolutionary process was taken with the appearance of a small, light-sensitive area on the skin of some primitive living things. But **what advantage could such a minute development on its own confer on a living thing in natural selection?** As well as this, there needs to be a visual center formed in the brain and a nerve system linked to it. As long as these rather complicated mechanisms are not linked to one another, then we cannot expect what we call "sight" to emerge. Darwin believed that variations emerged by chance. If that were the case, would not the appearance of all the many variations that sight requires in various places in the organism at the same time and their working together turn into a mystical puzzle?... However, a number of complementary changes working together in harmony and cooperation are needed for sight... Some molluscs' eyes have retina, cornea, and a lens of cellulose tissue just like ours. Now,

how can we explain the evolutionary processes of these two very different types requiring a string of chance events just by natural selection? It is a matter for debate whether Darwinists have been able to provide a satisfactory answer to this question...<sup>352</sup>

This problem is so great from the evolutionist point of view that the closer we look at the details, the worse the quandary the theory finds itself in. One important "detail" which needs to be looked at is the claim about "the cell which came to be sensitive to light." Darwinists gloss this over by saying, "Sight may have started by a single cell becoming sensitive to light." But what kind of design is such a structure supposed to have had?

### **The Chemistry of Sight**

In his book *Darwin's Black Box*, Michael Behe stresses that the structure of the living cell and all other biochemical systems were unknown "black boxes" for Darwin and his contemporaries. Darwin assumed that these black boxes possessed very simple structures and could have come about by chance. Now, however, modern biochemistry has opened up these black boxes and revealed the irreducibly complex structure of life. Behe states that Darwin's comments on the emergence of the eye seemed convincing because of the primitive level of nineteenth-century science:

Darwin persuaded much of the world that a modern eye evolved gradually from a simpler structure, but he did not even try to explain where his starting point—the relatively simple light-sensitive spot—came from. On the contrary, Darwin dismissed the question of the eye's ultimate origin... He had an excellent reason for declining the question: it was completely beyond nineteenth-century science. How the eye works—that is, what happens when a photon of light first hits the retina—simply could not be answered at that time.<sup>353</sup>

So, how does this system, which Darwin glossed over as a simple structure, actually work? How do the cells in the eye's retinal layer perceive the light rays that fall on them?

The answer to that question is rather complicated. When photons hit the cells of the retina they activate a chain action, rather like a domino

effect. The first of these domino pieces is a molecule called "11-cis-retinal" that is sensitive to photons. When struck by a photon, this molecule changes shape, which in turn changes the shape of a protein called "rhodopsin" to which it is tightly bound. Rhodopsin then takes a form that enables it to stick to another resident protein in the cell called "transducin."

Prior to reacting with rhodopsin, transducin is bound to another molecule called GDP. When it connects with rhodopsin, transducin releases the GDP molecule and is linked to a new molecule called GTP. That is why the new complex consisting of the two proteins (rhodopsin and transducin) and a smaller molecule (GTP) is called "GTP-transducin-rhodopsin."

But the process has only just begun. The new GTP-transducin-rhodopsin complex can now very quickly bind to another protein resident in the cell called "phosphodiesterase." This enables the phosphodiesterase protein to cut yet another molecule resident in the cell, called cGMP. Since this process takes place in the millions of proteins in the cell, the cGMP concentration is suddenly decreased.

How does all this help with sight? The last element of this chain reaction supplies the answer. The fall in the cGMP amount affects the ion channels in the cell. The so-called ion channel is a structure composed of proteins that regulate the number of sodium ions within the cell. Under normal conditions, the ion channel allows sodium ions to flow into the cell while another molecule disposes of the excess ions to maintain a balance. When the number of cGMP molecules falls, so does the number of sodium ions. This leads to an imbalance of charge across the membrane, which stimulates the nerve cells connected to these cells, forming what we refer to as an "electrical impulse." Nerves carry the impulses to the brain and "seeing" happens there.<sup>354</sup>

In brief, a single photon hits a single cell, and through a series of chain reactions the cell produces an electrical impulse. This stimulus is modulated by the energy of the photon—that is, the brightness of the light. Another fascinating fact is that all of the processes described so far happen in no more than one thousandth of a second. As soon as this chain reaction is completed, other specialized proteins within the cells convert elements such as 11-cis-retinal, rhodopsin and transducin back to their original states. The eye is under a constant shower of photons, and the chain reactions within

the eye's sensitive cells enable it to perceive each one of these.

The process of sight is actually a great deal more complicated than the outline presented here would indicate. However, even this brief overview is sufficient to demonstrate the extraordinary nature of the system. There is such a complicated, finely calculated design inside the eye that it is nonsensical to claim that this system could have come about by chance. The system possesses a totally irreducibly complex structure. If even one of the many molecular parts that enter into a chain reaction with each other were missing, or did not possess a suitable structure, then the system would not function at all.

It is clear that this system deals a heavy blow to Darwin's explanation of life by "chance." Michael Behe makes this comment on the chemistry of the eye and the theory of evolution:

Now that the black box of vision has been opened, **it is no longer enough for an evolutionary explanation of that power to consider only the anatomical structures of whole eyes**, as Darwin did in the nineteenth century (and as popularizers of evolution continue to do today). Each of the anatomical steps and structures that Darwin thought were so simple actually involves staggeringly complicated biochemical processes that cannot be papered over with rhetoric.<sup>355</sup>

The irreducibly complex structure of the eye not only definitively disproves the Darwinist theory, but also shows that life was created with a superior design.

## **The Lobster Eye**

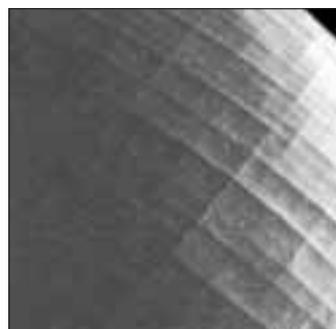
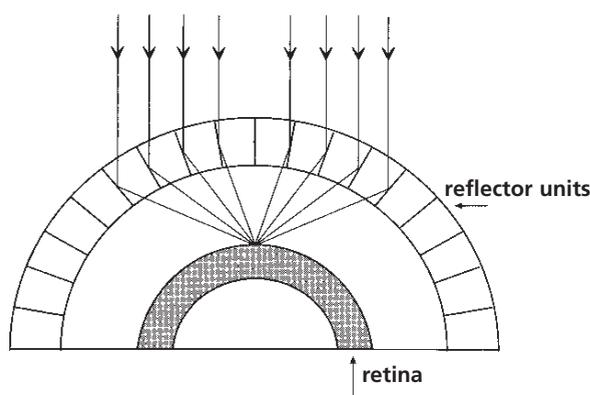
There are many different types of eye in the living world. We are accustomed to the camera-type eye found in vertebrates. This structure works on the principle of the refraction of light, which falls onto the lens and is focused on a point behind the lens inside the interior of the eye.

However, the eyes possessed by other creatures work by very different methods. One example is the lobster. **A lobster's eye works on a principle of reflection, rather than that of refraction.**

The most outstanding characteristic of the lobster eye is its surface, which is composed of numerous squares. As shown in the picture, these squares are positioned most precisely. As one astronomer commented in



The lobster eye is composed of numerous squares. These well-arranged squares are in fact the ends of tiny square tubes. The sides of each one of these square tubes are like mirrors that reflect the incoming light. This reflected light is focused onto the retina flawlessly. The sides of the tubes inside the eye are lodged at such perfect angles that they all focus onto a single point.



*Science*: "The lobster is the most unrectangular animal I've ever seen. But under the microscope a lobster's eye looks like perfect graph paper."<sup>356</sup>

These well-arranged squares are in fact the ends of tiny square tubes forming a structure resembling a honeycomb. At first glance, the honeycomb appears to be made up of hexagons, although these are actually the front faces of hexagonal prisms. In the lobster's eye, there are the squares in place of hexagons.

Even more intriguing is that the sides of each one of these square tubes are like mirrors that reflect the incoming light. This reflected light is focused onto the retina flawlessly. The sides of the tubes inside the eye are lodged at such perfect angles that they all focus onto a single point.

The extraordinary nature of the design of this system is quite indisputable. All of these perfect square tubes have a layer that works just like a mirror. Furthermore, each one of these cells is sited by means of precise

geometrical alignments, so that they all focus the light at a single point.

Michael Land, a scientist and researcher at the University of Sussex in England, was the first to examine the lobster eye structure in detail. Land stated that the eye structure had a most surprising design.<sup>357</sup>

It is obvious that the design in the lobster eye presents a great difficulty for the theory of evolution. Most importantly, it exemplifies the concept of "**irreducible complexity**." If even one of its features—such as the facets of the eye, which are perfect squares, the mirrored sides of each unit, or the retina layer at the back—were eliminated, the eye could never function. Therefore, it is impossible to maintain that the eye evolved step-by-step. It is scientifically unjustifiable to argue that such a perfect design as this could have come about haphazardly. It is quite clear that the lobster eye was created as a miraculous system.

One can find further traits in the lobster's eye that nullify the assertions of evolutionists. An interesting fact emerges when one looks at creatures with similar eye structures. **The reflecting eye, of which the lobster's eye is one example, is found in only one group of crustaceans, the so-called long-bodied decapods. This family includes the lobsters, the prawns and shrimp.**

The other members of the *Crustacea* class display "the refracting type eye structure," which works on completely different principles from those of the reflecting type. Here, the eye is made up of hundreds of cells like a honeycomb. Unlike the square cells in a lobster eye, these cells are either hexagonal or round. Furthermore, instead of reflecting light, small lenses in the cells refract the light onto the focus on the retina.

The majority of crustaceans have the refracting eye structure. According to evolutionist assumptions, all the creatures within the class *Crustacea* should have evolved from the same ancestor. Therefore, evolutionists claim that refracting eye evolved from a refracting eye, which is far more common among the crustacea and of a fundamentally simpler design.

However, such reasoning is impossible, because both eye structures function perfectly within their own systems and have no room for any "transitional" phase. A crustacean would be left sightless and would be eliminated by natural selection if the refracting lens in its eye were to diminish and be replaced by reflecting mirrored surfaces.

It is, therefore, certain that both of these eye structures were designed and created separately. There is such superb geometric precision in these eyes that entertaining the possibility of "chance" is simply ludicrous.

### **The Design in the Ear**

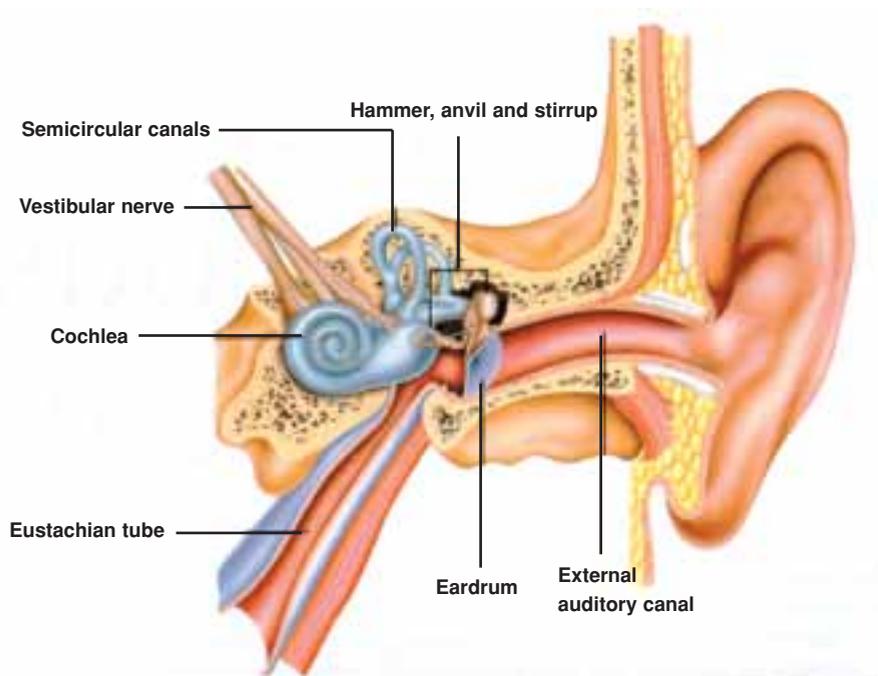
Another interesting example of the irreducibly complex organs in living things is the human ear.

As is commonly known, the hearing process begins with vibrations in the air. These vibrations are enhanced in the external ear. Research has shown that that part of the external ear known as the concha works as a kind of megaphone, and sound waves are intensified in the external auditory canal. In this way, the volume of sound waves increases considerably.

Sound intensified in this way enters the external auditory canal. This is the area from the external ear to the ear drum. One interesting feature of the auditory canal, which is some three and a half centimeters long, is the wax it constantly secretes. This liquid contains an antiseptic property which keeps bacteria and insects out. Furthermore, the cells on the surface of the auditory canal are aligned in a spiral form directed towards the outside, so that the wax always flows towards the outside of the ear as it is secreted.

Sound vibrations which pass down the auditory canal in this way reach the ear drum. This membrane is so sensitive that it can even perceive vibrations on the molecular level. Thanks to the exquisite sensitivity of the ear drum, you can easily hear somebody whispering from yards away. Or you can hear the vibration set up as you slowly rub two fingers together. Another extraordinary feature of the ear drum is that after receiving a vibration it returns to its normal state. Calculations have revealed that, after perceiving the tiniest vibrations, the ear drum becomes motionless again within up to four thousandths of a second. If it did not become motionless again so quickly, every sound we hear would echo in our ears.

The ear drum amplifies the vibrations which come to it, and sends them on to the middle ear region. Here, there are three bones in an extremely sensitive equilibrium with each other. These three bones are



known as the hammer, the anvil and the stirrup; their function is to amplify the vibrations that reach them from the ear drum.

But the middle ear also possesses a kind of "buffer," to reduce exceedingly high levels of sound. This feature is provided by two of the body's smallest muscles, which control the hammer, anvil and stirrup bones. These muscles enable exceptionally loud noises to be reduced before they reach the inner ear. Thanks to this mechanism, we hear sounds that are loud enough to shock the system at a reduced volume. These muscles are involuntary, and come into operation automatically, in such a way that even if we are asleep and there is a loud noise beside us, these muscles immediately contract and reduce the intensity of the vibration reaching the inner ear.

The middle ear, which possesses such a flawless design, needs to maintain an important equilibrium. The air pressure inside the middle ear has to be the same as that beyond the ear drum, in other words, the same as the atmospheric air pressure. But this balance has been thought of, and a canal between the middle ear and the outside world which allows an exchange of air has been built in. This canal is the Eustachean tube, a hollow tube running from the inner ear to the oral cavity.

## **The Inner Ear**

It will be seen that all we have examined so far consists of the vibrations in the outer and middle ear. The vibrations are constantly passed forward, but so far there is still nothing apart from a mechanical motion. In other words, there is as yet no sound.

The process whereby these mechanical motions begin to be turned into sound begins in the area known as the inner ear. In the inner ear is a spiral-shaped organ filled with a liquid. This organ is called the cochlea.

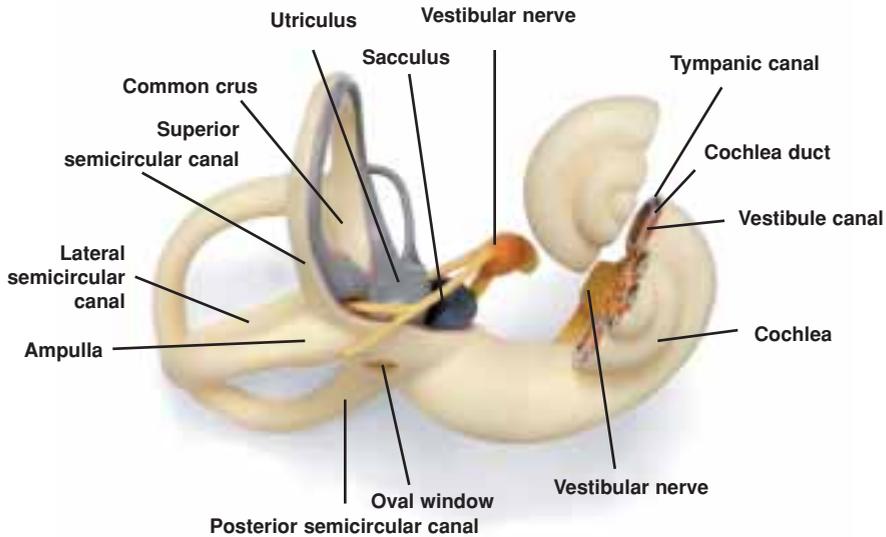
The last part of the middle ear is the stirrup bone, which is linked to the cochlea by a membrane. The mechanical vibrations in the middle ear are sent on to the liquid in the inner ear by this connection.

The vibrations which reach the liquid in the inner ear set up wave effects in the liquid. The inner walls of the cochlea are lined with small hair-like structures, called stereocilia, which are affected by this wave effect. These tiny hairs move strictly in accordance with the motion of the liquid. If a loud noise is emitted, then more hairs bend in a more powerful way. Every different frequency in the outside world sets up different effects in the hairs.

But what is the meaning of this movement of the hairs? What can the movement of the tiny hairs in the cochlea in the inner ear have to do with listening to a concert of classical music, recognizing a friend's voice, hearing the sound of a car, or distinguishing the millions of other kinds of sounds?

The answer is most interesting, and once more reveals the complexity of the design in the ear. Each of the tiny hairs covering the inner walls of the cochlea is actually a mechanism which lies on top of 16,000 hair cells. When these hairs sense a vibration, they move and push each other, just like dominos. This motion opens channels in the membranes of the cells lying beneath the hairs. And this allows the inflow of ions into the cells. When the hairs move in the opposite direction, these channels close again. Thus, this constant motion of the hairs causes constant changes in the chemical balance within the underlying cells, which in turn enables them to produce electrical signals. These electrical signals are forwarded to the brain by nerves, and the brain then processes them, turning them into sound.

Science has not been able to explain all the technical details of this



The complex structure of the inner ear. Inside this complicated bone structure is found both the system that maintains our balance, and also a very sensitive hearing system that turns vibrations into sound.

system. While producing these electrical signals, the cells in the inner ear also manage to transmit the frequencies, strengths, and rhythms coming from the outside. This is such a complicated process that science has so far been unable to determine whether the frequency-distinguishing system takes place in the inner ear or in the brain.

At this point, there is an interesting fact we have to consider concerning the motion of the tiny hairs on the cells of the inner ear. Earlier, we said that the hairs waved back and forth, pushing each other like dominos. But usually the motion of these tiny hairs is very small. Research has shown that a hair motion of just by the width of an atom can be enough to set off the reaction in the cell. Experts who have studied the matter give a very interesting example to describe this sensitivity of these hairs: If we imagine a hair as being as tall as the Eiffel Tower, the effect on the cell attached to it begins with a motion equivalent to just 3 centimeters of the top of the tower.<sup>358</sup>

Just as interesting is the question of how often these tiny hairs can move in a second. This changes according to the frequency of the sound. As the frequency gets higher, the number of times these tiny hairs can move reaches unbelievable levels: for instance, a sound of a frequency of 20,000 causes these tiny hairs to move 20,000 times a second.

The inner walls of the cochlea in the inner ear are lined with tiny hairs. These move in line with the wave motion set up in the liquid in the inner ear by vibrations coming from outside. In this way, the electrical balance of the cells to which the hairs are attached changes, and forms the signals we perceive as "sound."



Everything we have examined so far has shown us that the ear possesses an extraordinary design. **On closer examination, it becomes evident that this design is irreducibly complex**, since, in order for hearing to happen, it is necessary for all the component parts of the auditory system to be present and in complete working order. Take away any one of these—for instance, the hammer bone in the middle ear—or damage its structure, and you will no longer be able to hear anything. In order for you to hear, such different elements as the ear drum, the hammer, anvil and stirrup bones, the inner ear membrane, the cochlea, the liquid inside the cochlea, the tiny hairs that transmit the vibrations from the liquid to the underlying sensory cells, the latter cells themselves, the nerve network running from them to the brain, and the hearing center in the brain must all exist in complete working order. The system cannot develop "by stages," because the intermediate stages would serve no purpose.

### **The Origin of the Ear According to Evolutionists**

The irreducibly complex system in the ear is something that evolutionists can never satisfactorily explain. When we look at the theories evolutionists occasionally propose, we are met by a facile and superficial logic. For example, the writer Veysel Atayman, who translated the book *Im*

*Anfang War der Wasserstoff* (In the Beginning was Hydrogen), by the German biologist Hoimar von Ditfurth, into Turkish, and who has come to be regarded as an "evolution expert" by the Turkish media, sums up his "scientific" theory on the origin of the ear and the evidence for it in this way:

Our hearing organ, **the ear, emerged as a result of the evolution of the endoderm and exoderm layers, which we call the skin. One proof of this is that we feel low sounds in the skin of our stomachs!**<sup>359</sup>

In other words, Atayman thinks that the ear evolved from the ordinary skin in other parts of our bodies, and sees our feeling low sounds in our skin as a proof of this.

Let us first take Atayman's "theory," and then the "proof" he offers. We have just seen that the ear is a complex structure made up of dozens of different parts. To propose that this structure emerged with "the evolution of layers of skin" is, in a word, to build castles in the air. What mutation or natural selection effect could enable such an evolution to happen? Which part of the ear formed first? How could that part, the product of coincidence, have been chosen by natural selection even though it had no function? How did chance bring about all the sensitive mechanical balances in the ear: the ear drum, the hammer, anvil and stirrup bones, the muscles that control them, the inner ear, the cochlea, the liquid in it, the tiny hairs, the movement-sensitive cells, their nerve connections, etc.?

There is no answer to these questions. In fact, to suggest that all this complex structure is just "chance" is actually an attack on human intelligence. However, in Michael Denton's words, to the Darwinist "the idea is accepted without a ripple of doubt - the paradigm takes precedence!"<sup>360</sup>

Beyond the mechanisms of natural selection and mutation, evolutionists really believe in a "magic wand" that brings about the most complex designs by chance.

The "proof" that Atayman supplies for this imaginary theory is even more interesting. He says, "Our feeling low sounds in our skin is proof." What we call sound actually consists of vibrations in the air. Since vibrations are a physical effect, of course they can be perceived by our sense of touch. For that reason it is quite normal that we should be able to feel high and low sounds physically. Furthermore, these sounds also affect

bodies physically. The breaking of glass in a room under high intensities of sound is one example of this. The interesting thing is that the evolutionist writer Atayman should think that these effects are a proof of the evolution of the ear. The logic Atayman employs is the following: "The ear perceives sound waves, our skin is affected by these vibrations, therefore, the ear evolved from the skin." Following Atayman's logic, one could also say, "The ear perceives sound waves, glass is also affected by these, therefore the ear evolved from glass." Once one has left the bounds of reason, there is no "theory" that cannot be proposed.

Other scenarios that evolutionists put forward regarding the origin of the ear are surprisingly inconsistent. Evolutionists claim that all mammals, including human beings, evolved from reptiles. But, as we saw earlier, **reptiles' ear structures are very different from those of mammals**. All mammals possess the middle ear structure made up of the three bones that have just been described, whereas there is only one bone in the middle ear of all reptiles. In response to this, evolutionists claim that four separate bones in the jaws of reptiles changed place by chance and "migrated" to the middle ear, and that again by chance they took on just the right shape to turn into the anvil and stirrup bones. According to this imaginary scenario, the single bone in reptiles' middle ears changed shape and turned into the hammer bone, and the exceedingly sensitive equilibrium between the three bones in the middle ear was established by chance.<sup>361</sup>

This fantastical claim, based on no scientific discovery at all (it corresponds to nothing in the fossil record), is exceedingly self-contradictory. The most important point here is that such an imaginary change would leave a creature deaf. Naturally, a living thing cannot continue hearing if its jaw bones slowly start entering its inner ear. Such a species would be at a disadvantage compared to other living things and would be eliminated, according to what evolutionists themselves believe.

On the other hand, a living thing whose jaw bones were moving towards its ear would end up with a defective jaw. Such a creature's ability to chew would greatly decrease, and even disappear totally. This, too, would disadvantage the creature, and result in its elimination.

In short, the results which emerge when one examines the structure of ears and their origins clearly invalidate evolutionist assumptions. The

*Grolier Encyclopedia*, an evolutionist source, makes the admission that "**the origin of the ear is shrouded in uncertainty.**"<sup>362</sup> Actually, anyone who studies the system in the ear with common sense can easily see that it is the product of a conscious creation.

### **The Reproduction of *Rheobatrachus Silus***

Irreducible complexity is not a feature that we only see at the biochemical level or in complicated organs. Many biological systems



**The females of this species hide their young in their stomachs throughout the incubation period, and then give birth to them through their mouths. But in order for this to happen, a number of adjustments have to be made, all at the same time and with no mistakes allowed: The egg-structure has to be set up, the stomach acid must be neutralized, and the mothers have to be able to live for weeks without feeding.**

possessed by living things are irreducibly complex, and invalidate the theory of evolution for that reason. The extraordinary reproductive method of *Rheobatrachus silus*, a species of frog living in Australia, is an example of this.

The females of this species use a fascinating method to protect their eggs after fertilization. They swallow them. The tadpoles remain and grow in the stomach for the first six weeks after they hatch. How is it possible that they can remain in their mothers' stomach that long without being digested?

A flawless system has been created to enable them to do so. First, the female gives up eating and drinking for those six weeks, which means the stomach is reserved solely for the tadpoles. However, another danger is the regular release of hydrochloric acid and pepsin in the stomach. These chemicals would normally quickly kill the offspring. However, this is prevented by a very special measure. The fluids in the stomach of the mother are neutralized by the hormonelike substance prostaglandin E<sub>2</sub>, which is secreted first by the egg capsules and then by the tadpoles. Hence, the offspring grow healthily, even though they are swimming in a pool of acid.

How do the tadpoles feed inside the empty stomach? The solution to this has been thought of, too. The eggs of this species are significantly

larger than those of others, as they contain a yolk very rich in proteins, sufficient to feed the tadpoles for six weeks. The time of birth is designed perfectly, as well. The oesophagus of the female frog dilates during birth, just like the vagina of mammals during delivery. Once the young have emerged, the oesophagus and the stomach both return to normal, and the female starts feeding again.<sup>363</sup>

The miraculous reproduction system of *Rheobatrachus silus* explicitly invalidates the theory of evolution, since the whole system is irreducibly complex. Every step has to take place fully in order for the frogs to survive. The mother has to swallow the eggs, and has to stop feeding completely for six weeks. The eggs have to release a hormonelike substance to neutralize stomach acids. The addition of the extra protein-rich yolk to the egg is another necessity. The widening of the female's oesophagus cannot be coincidental. If all these things failed to happen in the requisite sequence, the froglets would not survive, and the species would face extinction.

Therefore, this system cannot have developed step-by-step, as asserted by the theory of evolution. The species has existed with this entire system intact since its first member came into existence. Another way of putting it is, they were created.

## **Conclusion**

In this section we have only examined a few examples of the concept of irreducible complexity. In fact, most organs and systems in living things possess the feature. On the biochemical level in particular, systems function by the working together of a number of independent parts, and cannot by any means be reduced to further simplicity. This fact invalidates Darwinism, which tries to account for the design in life by natural influences. Darwin said that "if it could be demonstrated that any complex organ existed, which could not possibly have been formed by numerous, successive, slight modifications, my theory would absolutely break down." Today, modern biology has revealed countless examples of this. One can only conclude, then, that Darwinism has "absolutely" broken down.

# EVOLUTION AND THERMODYNAMICS

The Second Law of Thermodynamics, which is accepted as one of the basic laws of physics, holds that under normal conditions all systems left on their own tend to become disordered, dispersed, and corrupted in direct relation to the amount of time that passes. Everything, whether living or not, wears out, deteriorates, decays, disintegrates, and is destroyed. This is the absolute end that all beings will face one way or another, and according to the law, the process cannot be avoided.

This is something that all of us have observed. For example if you take a car to a desert and leave it there, you would hardly expect to find it in a better condition when you came back years later. On the contrary, you would see that its tires had gone flat, its windows had been broken, its chassis had rusted, and its engine had stopped working. The same inevitable process holds true for living things.

The second law of thermodynamics is the means by which this natural process is defined, with physical equations and calculations.

This famous law of physics is also known as the "law of entropy." In physics, entropy is the measure of the disorder of a system. A system's entropy increases as it moves from an ordered, organized, and planned state towards a more disordered, dispersed, and unplanned one. The more disorder there is in a system, the higher its entropy is. The law of entropy holds that the entire universe is unavoidably proceeding towards a more disordered, unplanned, and disorganized state.

The truth of the second law of thermodynamics, or the law of entropy, has been experimentally and theoretically established. All foremost



**If you leave a car out in natural conditions, it will rust and decay. In the same way, without an intelligent organization all the systems in the universe would decay. This is an incontrovertible law.**

scientists agree that the law of entropy will remain the principle paradigm for the foreseeable future. Albert Einstein, the greatest scientist of our age, described it as the "premier law of all of science." Sir Arthur Eddington also referred to it as the "supreme metaphysical law of the entire universe."<sup>364</sup>

Evolutionary theory ignores this fundamental law of physics. The mechanism offered by evolution totally contradicts the second law. The theory of evolution says that disordered, dispersed, and lifeless atoms and molecules spontaneously came together over time, in a particular order, to form extremely complex molecules such as proteins, DNA, and RNA, whereupon millions of different living species with even more complex structures gradually emerged. According to the theory of evolution, this

supposed process—which yields a more planned, more ordered, more complex and more organized structure at each stage—was formed all by itself under natural conditions. The law of entropy makes it clear that this so-called natural process utterly contradicts the laws of physics.

Evolutionist scientists are also aware of this fact. J. H. Rush states:

In the complex course of its evolution, life exhibits a remarkable contrast to the tendency expressed in the Second Law of Thermodynamics. Where the Second Law expresses an irreversible progression toward increased entropy and disorder, life evolves continually higher levels of order.<sup>365</sup>

The evolutionist author Roger Lewin expresses the thermodynamic impasse of evolution in an article in *Science*:

One problem biologists have faced is the apparent contradiction by evolution of the second law of thermodynamics. Systems should decay through time, giving less, not more, order.<sup>366</sup>

Another defender of the theory of evolution, George Stravropoulos, states the thermodynamic impossibility of the spontaneous formation of life and the impossibility of explaining the existence of complex living mechanisms by natural laws in the well-known evolutionist journal *American Scientist*:

Yet, under ordinary conditions, no complex organic molecule can ever form spontaneously, but will rather disintegrate, in agreement with the second law. Indeed, the more complex it is, the more unstable it will be, and the more assured, sooner or later, its disintegration. Photosynthesis and all life processes, and even life itself, *cannot* yet be understood in terms of thermodynamics or any other exact science, despite the use of confused or deliberately confusing language.<sup>367</sup>

As we have seen, the evolution claim is completely at odds with the laws of physics. The second law of thermodynamics constitutes an insurmountable obstacle for the scenario of evolution, in terms of both science and logic. Unable to offer any scientific and consistent explanation to overcome this obstacle, evolutionists can only do so in their imagination. For instance, the well-known evolutionist Jeremy Rifkin notes his belief that evolution overwhelms this law of physics with a "magical power":

The Entropy Law says that evolution dissipates the overall available energy for life on this planet. Our concept of evolution is the exact opposite. We

believe that evolution somehow magically creates greater overall value and order on earth.<sup>368</sup>

These words well indicate that evolution is a dogmatic belief rather than a scientific thesis.

## **The Misconception About Open Systems**

Some proponents of evolution have recourse to an argument that the second law of thermodynamics holds true only for "closed systems," and that "open systems" are beyond the scope of this law. This claim goes no further than being an attempt by some evolutionists to distort scientific facts that invalidate their theory. In fact, a large number of scientists openly state that this claim is invalid, and violates thermodynamics. One of these is the Harvard scientist John Ross, who also holds evolutionist views. He explains that these unrealistic claims contain an important scientific error in the following remarks in *Chemical and Engineering News*:

...there are no known violations of the second law of thermodynamics. Ordinarily the second law is stated for isolated systems, but **the second law applies equally well to open systems**. ...there is somehow associated with the field of far-from-equilibrium phenomena the notion that the second law of thermodynamics fails for such systems. **It is important to make sure that this error does not perpetuate itself.**<sup>369</sup>

An "open system" is a thermodynamic system in which energy and matter flow in and out. Evolutionists hold that the world is an open system: that it is constantly exposed to an energy flow from the sun, that the law of entropy does not apply to the world as a whole, and that ordered, complex living beings can be generated from disordered, simple, and inanimate structures.

However, there is an obvious distortion here. The fact that a system has an energy inflow is not enough to make that system ordered. Specific mechanisms are needed to make the energy functional. For instance, a car needs an engine, a transmission system, and related control mechanisms to convert the energy in petrol to work. Without such an energy conversion system, the car will not be able to use the energy stored in petrol.

The same thing applies in the case of life as well. It is true that life

derives its energy from the sun. However, solar energy can only be converted into chemical energy by the incredibly complex energy conversion systems in living things (such as photosynthesis in plants and the digestive systems of humans and animals). No living thing can live without such energy conversion systems. Without an energy conversion system, the sun is nothing but a source of destructive energy that burns, parches, or melts.

As can be seen, a thermodynamic system without an energy conversion mechanism of some sort is not advantageous for evolution, be it open or closed. No one asserts that such complex and conscious mechanisms could have existed in nature under the conditions of the primeval earth. Indeed, the real problem confronting evolutionists is the question of how complex energy-converting mechanisms such as photosynthesis in plants, which cannot be duplicated even with modern technology, could have come into being on their own.

The influx of solar energy into the world would be unable to bring about order on its own. Moreover, no matter how high the temperature may become, amino acids resist forming bonds in ordered sequences. Energy by itself is incapable of making amino acids form the much more complex molecules of proteins, or of making proteins form the much more complex and organized structures of cell organelles.

### **Ilya Prigogine and the Myth of the "Self-Organization of Matter"**

Quite aware that the second law of thermodynamics renders evolution impossible, some evolutionist scientists have made speculative attempts to square the circle between the two, in order to be able to claim that evolution is possible.

One person distinguished by his efforts to marry thermodynamics and evolution is the Belgian scientist Ilya Prigogine.

Starting out from chaos theory, Prigogine proposed a number of hypotheses in which order develops from chaos (disorder). However, despite all his best efforts, he was unable to reconcile thermodynamics and evolution.

In his studies, he tried to link irreversible physical processes to the

evolutionist scenario on the origin of life, but he was unsuccessful. His books, which are completely theoretical and include a large number of mathematical propositions which cannot be implemented in real life and which there is no possibility of observing, have been criticized by scientists, recognized as experts in the fields of physics, chemistry and thermodynamics, as having no practical and concrete value.



Ilya Prigogine

For instance, P. Hohenberg, a physicist regarded as an expert in the fields of statistical mechanics and pattern formation, and one of the authors of the book *Review of Modern Physics*, sets out his comments on Prigogine's studies in the May 1995 edition of *Scientific American*:

I don't know of a single phenomenon his theory has explained.<sup>370</sup>

And Cosma Shalizi, a theoretical physicist from Wisconsin University, has this to say about the fact that Prigogine's studies have reached no firm conclusion or explanation:

...in the just under five hundred pages of his *Self-Organization in Nonequilibrium Systems*, **there are just four graphs of real-world data, and no comparison of any of his models with experimental results.** Nor are his **ideas about irreversibility at all connected to self-organization**, except for their both being topics in statistical physics.<sup>371</sup>

The studies in the physical field by the determinedly materialist Prigogine also had the intention of providing support for the theory of evolution, because, as we have seen in the preceding pages, the theory of evolution is in clear conflict with the entropy principle, i.e., the second law of thermodynamics. The law of entropy, as we know, definitively states that when any organized, and complex structure is left to natural conditions, then loss of organization, complexity and information will result. In opposition to this, the theory of evolution claims that unordered, scattered, and unconscious atoms and molecules came together and gave rise to living things with their organized systems.

Prigogine determined to try to invent formulae that would make processes of this kind feasible.

However, all these efforts resulted in nothing but a series of theoretical experiments.

The two most important theories that emerged as a result of that aim were the theory of "self-organization" and the theory of "dissipative structures." The first of these maintains that simple molecules can organize together to form complex living systems; the second claims that ordered, complex systems can emerge in unordered, high-entropy systems. But these have no other practical and scientific value than creating new, imaginary worlds for evolutionists.

The fact that these theories explain nothing, and have produced no results, is admitted by many scientists. The well-known physicist Joel Keizer writes: "His supposed criteria for predicting **the stability of far-from-equilibrium dissipative structures fails**—except for states very near equilibrium."<sup>372</sup>

The theoretical physicist Cosma Shalizi has this to say on the subject: "Second, he tried to push forward a rigorous and well-grounded study of pattern formation and self-organization almost before anyone else. **He failed, but the attempt was inspiring.**"<sup>373</sup>

F. Eugene Yates, editor of *Self-Organizing Systems: The Emergence of Order*, sums up the criticisms directed at Prigogine by Daniel L. Stein and the Nobel Prize-winning scientist Phillip W. Anderson, in an essay in that same journal:

The authors [Anderson and Stein] compare symmetry-breaking in thermodynamic equilibrium systems (leading to phase change) and in systems far from equilibrium (leading to dissipative structures). Thus, the authors do not believe that **speculation about dissipative structures and their broken symmetries can, at present, be relevant to questions of the origin and persistence of life.**<sup>374</sup>

In short, Prigogine's theoretical studies are of no value in explaining the origin of life. The same authors make this comment about his theories:

Contrary to statements in a number of books and articles in this field, we believe that there is no such theory, and **it even may be that there are no such structures as they are implied to exist** by Prigogine, Haken, and their collaborators.<sup>375</sup>

In essence, experts in the subject state that none of the theses Prigogine put forward possess any truth or validity, and that structures of

the kind he discusses (dissipative structures) may not even really exist.

Prigogine's claims are considered in great detail in Jean Bricmont's article "*Science of Chaos or Chaos in Science?*" which makes their invalidity clear.

Despite the fact that Prigogine did not manage to find a way to support evolution, the mere fact that he took initiatives of this sort was enough for the evolutionists to accord him the very greatest respect. A large number of evolutionists have welcomed Prigogine's concept of "self-organization" with great hope and a superficial bias. Prigogine's imaginary theories and concepts have nevertheless convinced many people who do not know much about the subject that evolution has resolved the dilemma of thermodynamics, whereas even Prigogine himself has accepted that the theories he has produced for the molecular level do not apply to living systems—for instance, a living cell:

The problem of biological order involves the transition from the molecular activity to the supermolecular order of the cell. This problem is far from being solved.<sup>376</sup>

These are the speculations that evolutionists have indulged in, encouraged by Prigogine's theories, which were meant to resolve the conflict between evolution and other physical laws.

## **The Difference Between Organized and Ordered Systems**

If we look carefully at Prigogine and other evolutionists' claims, we can see that they have fallen into a very important trap. In order to make evolution fit in with thermodynamics, evolutionists are constantly trying to prove that a given order can emerge from open systems.

And here it is important to bring out two key concepts to reveal the deceptive methods the evolutionists use. The deception lies in the deliberate confusing of two distinct concepts: "ordered" and "organized."

We can make this clear with an example. Imagine a completely flat beach on the seashore. When a strong wave hits the beach, mounds of sand, large and small, form bumps on the surface of the sand.

This is a process of "ordering." The seashore is an open system, and the energy flow (the wave) that enters it can form simple patterns in the

sand, which look completely regular. From the thermodynamic point of view, it can set up order here where before there was none. But we must make it clear that those same waves cannot build a castle on the beach. If we see a castle there, we are in no doubt that someone has constructed it, because the castle is an "organized" system. In other words, it possesses a clear design and information. Every part of it has been made by an intelligent entity in a planned manner.

The difference between the sand and the castle is that the former is an organized complexity, whereas the latter possesses only order, brought about by simple repetitions. The order formed from repetitions is as if an object (in other words the flow of energy entering the system) had fallen on the letter "a" on a typewriter keyboard, writing "aaaaaaa" hundreds of times. But the string of "a"s in an order repeated in this manner contains no information, and no complexity. In order to write a complex chain of letters actually containing information (in other words a meaningful sentence, paragraph or book), the presence of intelligence is essential.

The same thing applies when a gust of wind blows into a dusty room. When the wind blows in, the dust which had been lying in an even layer may gather in one corner of the room. This is also a more ordered situation than that which existed before, in the thermodynamic sense, but the individual specks of dust cannot form a portrait of someone on the floor in an organized manner.

This means that complex, organized systems can never come about as the result of natural processes. Although simple examples of order can happen from time to time, these cannot go beyond certain limits.

But evolutionists point to this self-ordering which emerges through natural processes as a most important proof of evolution, portray such cases as examples of "self-organization." As a result of this confusion of concepts, they propose that living systems could develop of their own accord from occurrences in nature and chemical reactions. The methods and studies employed by Prigogine and his followers, which we considered above, are based on this deceptive logic.

However, as we made clear at the outset, organized systems are completely different structures from ordered ones. While ordered systems contain structures formed of simple repetitions, organized systems contain highly complex structures and processes, one often embedded inside the

other. In order for such structures to come into existence, there is a need for intelligence, knowledge, and planning. Jeffrey Wicken, an evolutionist scientist, describes the important difference between these two concepts in this way:

'Organized' systems are to be carefully distinguished from 'ordered' systems. Neither kind of system is 'random,' but whereas ordered systems are generated according to simple algorithms and therefore lack complexity, organized systems must be assembled element by element according to an external 'wiring diagram' with a high information content ... Organization, then, is functional complexity and carries information.<sup>377</sup>

Ilya Prigogine—maybe as a result of evolutionist wishful thinking—resorted to a confusion of these two concepts, and advertised examples of molecules which ordered themselves under the influence of energy inflows as "self-organization."

The American scientists Charles B. Thaxton, Walter L. Bradley and Roger L. Olsen, in their book titled *The Mystery of Life's Origin*, explain this fact as follows:

... In each case random movements of molecules in a fluid are spontaneously replaced by a highly ordered behaviour. Prigogine, Eigen, and others have suggested that a similar sort of self-organization may be intrinsic in organic chemistry and can potentially account for the highly complex macromolecules essential for living systems. But such analogies have scant relevance to the origin-of-life question. A major reason is that they fail to distinguish between order and complexity...<sup>378</sup>

And this is how the same scientists explain the logical shallowness and distortion of claiming that water turning into ice is an example of how biological order can spontaneously emerge:

It has often been argued by analogy to water crystallizing to ice that simple monomers may polymerize into complex molecules such as protein and DNA. **The analogy is clearly inappropriate**, however... The atomic bonding forces draw water molecules into an orderly crystalline array when the thermal agitation (or entropy driving force) is made sufficiently small by lowering the temperature. **Organic monomers such as amino acids resist combining at all at any temperature however, much less some orderly arrangement.**<sup>379</sup>

Prigogine devoted his whole career to reconciling evolution and

thermodynamics, but even he admitted that there was no resemblance between the crystallization of water and the emergence of complex biological structures:

The point is that in a non-isolated system there exists a possibility for formation of ordered, low-entropy structures at sufficiently low temperatures. This ordering principle is responsible for the appearance of ordered structures such as crystals as well as for the phenomena of phase transitions. **Unfortunately this principle cannot explain the formation of biological structures.**<sup>380</sup>

In short, no chemical or physical effect can explain the origin of life, and the concept of "the self-organization of matter" will remain a fantasy.

### **Self-Organization: A Materialist Dogma**

The claim that evolutionists maintain with the concept of "self-organization" is the belief that inanimate matter can organize itself and generate a complex living thing. This is an utterly unscientific conviction: Observation and experiment have incontrovertibly proven that matter has no such property. The famous English astronomer and mathematician Sir Fred Hoyle notes that matter cannot generate life by itself, without deliberate interference:

**If there were a basic principle of matter which somehow drove organic systems toward life, its existence should easily be demonstrable in the laboratory.** One could, for instance, take a swimming bath to represent the primordial soup. Fill it with any chemicals of a non-biological nature you please. Pump any gases over it, or through it, you please, and shine any kind of radiation on it that takes your fancy. Let the experiment proceed for a year and see how many of those 2,000 enzymes [proteins produced by living cells] have appeared in the bath. I will give the answer, and so save the time and trouble and expense of actually doing the experiment. You will find nothing at all, except possibly for a tarry sludge composed of amino acids and other simple organic chemicals.<sup>381</sup>

Evolutionary biologist Andrew Scott admits the same fact:

**Take some matter, heat while stirring and wait.** That is the modern version of Genesis. The 'fundamental' forces of gravity, electromagnetism and the

strong and weak nuclear forces are presumed to have done the rest... But how much of this neat tale is firmly established, and **how much remains hopeful speculation?** In truth, the mechanism of almost every major step, from chemical precursors up to the first recognizable cells, is **the subject of either controversy or complete bewilderment.**<sup>382</sup>

So why do evolutionists continue to believe in scenarios such as the "self-organization of matter," which have no scientific foundation? Why are they so determined to reject the intelligence and planning that can so clearly be seen in living systems?

The answer to these questions lies hidden in the materialist philosophy that the theory of evolution is fundamentally constructed on. Materialist philosophy believes that only matter exists, for which reason living things need to be accounted for in a manner based on matter. It was this difficulty which gave birth to the theory of evolution, and no matter how much it conflicts with the scientific evidence, it is defended for just that reason. A professor of chemistry from New York University and DNA expert, Robert Shapiro, explains this belief of evolutionists about the "self-organization of matter" and the materialist dogma lying at its heart as follows:

Another evolutionary principle is therefore needed to take us across the gap from mixtures of simple natural chemicals to the first effective replicator. This principle has not yet been described in detail or demonstrated, but it is anticipated, and given names such as chemical evolution and **self-organization of matter. The existence of the principle is taken for granted in the philosophy of dialectical materialism,** as applied to the origin of life by Alexander Oparin.<sup>383</sup>

The truths that we have been examining in this section clearly demonstrate the impossibility of evolution in the face of the second law of thermodynamics. The concept of "self-organization" is another dogma that evolutionist scientists are trying to keep alive despite all the scientific evidence.

# INFORMATION THEORY AND THE END OF MATERIALISM

**M**aterialist philosophy lies at the basis of the theory of evolution. Materialism rests on the supposition that everything that exists is matter. According to this philosophy, matter has existed since eternity, will continue to exist forever, and there is nothing but matter. In order to provide support for their claim, materialists use a logic called "reductionism." This is the idea that things which are not observable can also be explained by material causes.

To make matters clearer, let us take the example of the human mind. It is evident that the mind cannot be touched or seen. Moreover, it has no center in the human brain. This situation unavoidably leads us to the conclusion that mind is a concept beyond matter. Therefore, the being which we refer to as "I," who thinks, loves, fears, worries, and feels pleasure or pain, is not a material being in the same way as a sofa, a table or a stone.

Materialists, however, claim that mind is "reducible to matter." According to the materialist claim, thinking, loving, worrying and all our mental activities are nothing but chemical reactions taking place between the atoms in the brain. Loving someone is a chemical reaction in some cells in our brain, and fear is another. The famous materialist philosopher **Karl Vogt** is notorious for his assertion that "**the brain secretes thought just as the liver secretes bile.**"<sup>384</sup> Bile, however, is matter, whereas there is no evidence that thought is.

Reductionism is a logical deduction. However, a logical deduction can be based on solid grounds or on shaky ones. For this reason, the question we need to ask is: **What happens when reductionism is compared to scientific data?**

Nineteenth-century materialist scientists and thinkers thought that the answer would be that science verifies reductionism. Twentieth-century science, however, has revealed a very different picture.

One of the most salient feature of this picture is "information," which is present in nature and can never be reduced to matter.

### **The Difference between Matter and Information**

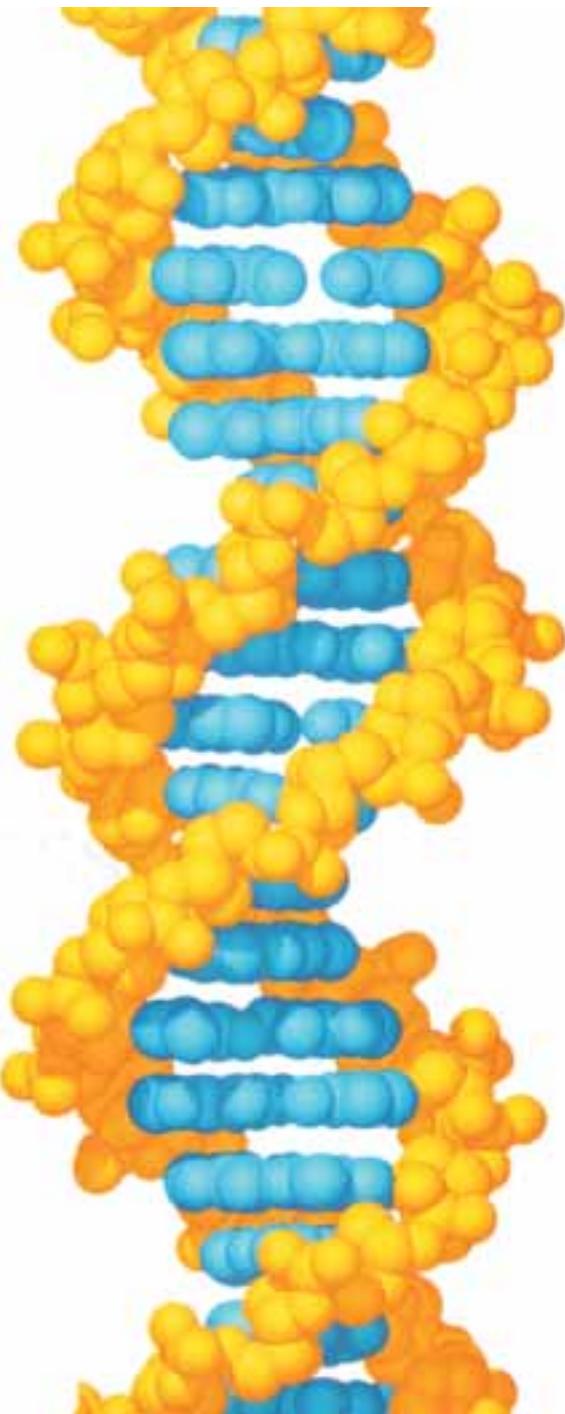
We earlier mentioned that there is incredibly comprehensive information contained in the DNA of living things. Something as small as a hundred thousandth of a millimeter across contains a sort of "data bank" that specifies all the physical details of the body of a living thing. Moreover, the body also contains a system that reads this information, interprets it and carries out "production" in line with it. In all living cells, the information in the DNA is "read" by various enzymes, and proteins are produced. This system makes possible the production of millions of proteins every second, of just the required type for just the places where they are needed in our bodies. In this way, dead eye cells are replaced by living ones, and old blood cells by new ones.

At this point, let us consider the claim of materialism: Is it possible that the information in DNA could be reduced to matter, as materialists suggest? Or, in other words, can it be accepted that DNA is merely a collection of matter, and the information it contains came about as a result of the random interactions of such pieces of matter?

All the scientific research, experiments and observations carried out in the twentieth century show that the answer to this question is a definite "No." The director of the German Federal Physics and Technology Institute, Prof. Werner Gitt, has this to say on the issue:

A coding system always entails a nonmaterial intellectual process. A physical matter cannot produce an information code. All experiences show that every piece of creative information represents some mental effort and can be traced to a personal idea-giver who exercised his own free will, and who is endowed with an intelligent mind.... **There is no known law of nature, no known process and no known sequence of events which can cause information to originate by itself in matter...**<sup>385</sup>

Werner Gitt's words summarize the conclusions of "**information**



**It is impossible for the information inside DNA to have emerged by chance and natural processes.**

**theory,"** which has been developed in the last 50 years, and which is accepted as a part of thermodynamics. Information theory investigates the origin and nature of the information in the universe. The conclusion reached by information theoreticians as a result of long studies is that **"Information is something different from matter. It can never be reduced to matter.** The origin of information and physical matter must be investigated separately."

For instance, let us think of the source of a book. A book consists of paper, ink, and the information it contains. Paper and ink are material elements. Their source is again matter: Paper is made of cellulose, and ink of various chemicals. However, the information in the book is nonmaterial, and cannot have a material source. The source of the information in each book is the mind of the person who wrote it.

Moreover, this mind determines how the paper and ink will be used. A book initially forms in the mind of the writer. The writer builds a chain of logic in his mind, and orders his sentences. As a second step, he puts them into material form, which is to say that he translates the information in his mind into letters, using a pen, a

typewriter or a computer. Later, these letters are printed in a publishing house, and take the shape of a book made up of paper and ink.

We can therefore state this general conclusion: If physical matter contains information, then that matter must have been designed by a mind that possessed the information in question. First there is the mind. That mind translates the information it possesses into matter, which constitutes the act of design.

## **The Origin of the Information in Nature**

When we apply this scientific definition of information to nature, a very important result ensues. This is because nature overflows with an immense body of information (as, for example, in the case of DNA), and since this information cannot be reduced to matter, it therefore comes from a source beyond matter.

One of the foremost advocates of the theory of evolution, George C. Williams, admits this reality, which most materialists and evolutionists are reluctant to see. Williams has strongly defended materialism for years, but in an article he wrote in 1995, he states the incorrectness of the materialist (reductionist) approach which holds that everything is matter:

Evolutionary biologists have failed to realize that they work with two more or less incommensurable domains: that of information and that of matter... These two domains will never be brought together in any kind of the sense usually implied by the term "reductionism." ...The gene is a package of information, not an object... In biology, when you're talking about things like genes and genotypes and gene pools, you're talking about information, not physical objective reality... This dearth of shared descriptors **makes matter and information two separate domains of existence, which have to be discussed separately, in their own terms.**<sup>386</sup>

Therefore, contrary to the supposition of materialists, the source of the information in nature cannot be matter itself. The source of information is not matter but a superior Wisdom beyond matter. This Wisdom existed prior to matter. The possessor of this Wisdom is God, the Lord of all the Worlds. Matter was brought into existence, given form, and organized by Him.

## Materialist Admissions

We have already described how one of the fundamental principles that make up life is "knowledge," and it is clear that this knowledge proves the existence of an intelligent Creator. The theory of evolution, which tries to account for life as being the result of coincidences in a purely material world, and the materialist philosophy it is based on, are quite helpless in the face of this reality.

When we look at evolutionists' writings, we sometimes see that this helplessness is openly admitted. One forthright authority on this subject is the well-known French zoologist Pierre-Paul Grassé. He is a materialist and an evolutionist, although he sometimes openly admits the quandaries Darwinist theory faces. According to Grassé, the most important truth which invalidates the Darwinist account is the knowledge that gives rise to life:

Any living being possesses an enormous amount of "intelligence," very much more than is necessary to build the most magnificent of cathedrals. Today, this "intelligence" is called information, but it is still the same thing. It is not programmed as in a computer, but rather it is condensed on a molecular scale in the chromosomal DNA or in that of every other organelle in each cell. This "intelligence" is the *sine qua non* of life. Where does it come from?... This is a problem that concerns both biologists and philosophers, and, at present, science seems incapable of solving it.<sup>387</sup>

The reason why Pierre-Paul Grassé says, "Science seems incapable of solving it," is that he does not want any nonmaterialist explanation to be thought of as "scientific." However, science itself invalidates the hypotheses of materialist philosophy, and proves the existence of a Creator. Grassé and other materialist "scientists" either ignore this reality, or else say, "Science does not explain this." They do this because they are **materialists first and scientists second**, and they continue to believe in materialism, even if science demonstrates the exact opposite.

For this reason, in order to possess a correct scientific attitude, one has to distinguish between science and materialist philosophy.

# DISTINGUISHING BETWEEN SCIENCE AND MATERIALISM

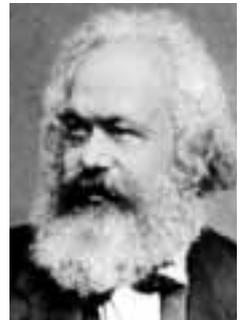
The information we have considered throughout this book has shown us that the theory of evolution has no scientific basis, and that, on the contrary, evolutionist claims conflict with scientific facts. In other words, the force that keeps evolution alive is not science. Evolution may be maintained by some "scientists," but behind it there is another influence at work.

This other influence is materialist philosophy. The theory of evolution is simply materialist philosophy applied to nature, and those who support that philosophy do so despite the scientific evidence.

This relationship between materialism and the theory of evolution is accepted by "authorities" on these concepts. For example, the discovery of Darwin was described by Leon Trotsky as "the highest triumph of the dialectic in the whole field of organic matter."<sup>388</sup>

The evolutionary biologist Douglas Futuyma writes, "Together with Marx's materialist theory of history and society.... **Darwin hewed the final planks of the platform of mechanism and materialism.**"<sup>389</sup> And the evolutionary paleontologist Stephen Jay Gould says, "**Darwin applied a consistent philosophy of materialism to his interpretation of nature.**"<sup>390</sup>

Materialist philosophy is one of the oldest beliefs in the world, and assumes the absolute and exclusive existence of matter as its basic principle. According to this view, matter has always existed, and everything that exists consists of matter. This makes belief in a Creator



Karl Marx

impossible, of course, because if matter has always existed, and if everything consists of matter, then there can be no supramaterial Creator who created it.

So the question becomes one of whether the materialist point of view is correct. One method of testing whether a philosophy is true or false is to investigate the claims it makes about science by using scientific methods. For instance, a philosopher in the tenth century could have claimed that there was a divine tree on the surface of the moon and that all living things actually grew on the branches of this huge tree like fruit, and then fell off onto the earth. Some people might have found this philosophy attractive and believed in it. But in the twentyfirst century, at a time when man has managed to walk on the moon, it is no longer possible to seriously hold such a belief. Whether such a tree exists there or not can be determined by scientific methods, that is, by observation and experiment.

We can therefore investigate by means of scientific methods the materialist claim that matter has existed for all eternity and that this matter can organize itself without a supramaterial Creator and cause life to begin. When we do this, we see that materialism has already collapsed, because the idea that matter has existed since the beginning of time has been overthrown by the Big Bang theory which shows that the universe was created from nothingness. The claim that matter organized itself and created life is the claim that we call the theory of evolution—which this book has been examining—and which has been shown to have collapsed.

However, if someone is determined to believe in materialism and puts his devotion to materialist philosophy before everything else, then he will act differently. If he is a materialist first and a scientist second, he will not abandon materialism when he sees that evolution is disproved by science. On the contrary, he will attempt to uphold and defend materialism by trying to support evolution, no matter what. This is exactly the predicament that evolutionists defending the theory of evolution find themselves in today.

Interestingly enough, they also confess this fact from time to time. A well-known geneticist and outspoken evolutionist, Richard C. Lewontin from Harvard University, confesses that he is "a materialist first and a scientist second" in these words:

It is not that the methods and institutions of science somehow compel us

accept a material explanation of the phenomenal world, but, on the contrary, that we are forced by **our *a priori* adherence to material causes to create an apparatus of investigation and a set of concepts that produce material explanations, no matter how counter-intuitive, no matter how mystifying to the uninitiated.** Moreover, that materialism is absolute, so we cannot allow a Divine Foot in the door.<sup>391</sup>

The term "a priori" that Lewontin uses here is quite important. This philosophical term refers to a presupposition not based on any experimental knowledge. A thought is "a priori" when you consider it to be correct and accept it as so even if there is no information available to confirm it. As the evolutionist Lewontin frankly states, materialism is an "a priori" commitment for evolutionists, who then try to adapt science to this preconception. Since materialism definitely necessitates denying the existence of a Creator, they embrace the only alternative they have to hand, which is the theory of evolution. It does not matter to such scientists that evolution has been belied by scientific facts, because they have accepted it "a priori" as true.

This prejudiced behavior leads evolutionists to a belief that "unconscious matter composed itself," which is contrary not only to science, but also to reason. The concept of "the self-organization of matter," which we examined in an earlier chapter, is an expression of this.

Evolutionist propaganda, which we constantly come across in the Western media and in well-known and "esteemed" science magazines, is the outcome of this ideological necessity. Since evolution is considered to be indispensable, it has been turned into a sacred cow by the circles that set the standards of science.

Some scientists find themselves in a position where they are forced to defend this far-fetched theory, or at least avoid uttering any word against it, in order to maintain their reputations. Academics in Western countries have to have articles published in certain scientific journals in order to attain and hold onto their professorships. All of the journals dealing with biology are under the control of evolutionists, and they do not allow any anti-evolutionist article to appear in them. Biologists, therefore, have to conduct their research under the domination of this theory. They, too, are part of the established order, which regards evolution as an ideological necessity, which is why they blindly defend all the "impossible coincidences" we have been examining in this book.

## The Definition of the "Scientific Cause"

The German biologist Hoimar von Ditfurth, a prominent evolutionist, is a good example of this bigoted materialist understanding. After Ditfurth cites an example of the extremely complex composition of life, this is what he says concerning the question of whether it could have emerged by chance or not:

Is such a harmony that emerged only out of coincidences possible in reality? This is the basic question of the whole of biological evolution. ...Critically speaking, we can say that somebody who accepts the modern science of nature has no other alternative than to say "yes," because he aims to explain natural phenomena by means that are understandable and **tries to derive them from the laws of nature without reverting to supernatural interference.**<sup>392</sup>

Yes, as Ditfurth states, the materialist scientific approach adopts as its basic principle explaining life by denying "supernatural interference," i.e., creation. Once this principle is adopted, even the most impossible scenarios are easily accepted. It is possible to find examples of this dogmatic mentality in almost all evolutionist literature. Professor Ali Demirsoy, the well-known advocate of evolutionary theory in Turkey, is just one of many. As we have already pointed out, according to Demirsoy, the probability of the coincidental formation of cytochrome-C, an essential protein for life, is "**as unlikely as the possibility of a monkey writing the history of humanity on a typewriter without making any mistakes.**"<sup>393</sup>

There is no doubt that to accept such a possibility is actually to reject the basic principles of reason and common sense. Even one single correctly formed letter written on a page makes it certain that it was written by a person. When one sees a book of world history, it becomes even more certain that the book has been written by an author. No logical person would agree that the letters in such a huge book could have been put together "by chance."

However, it is very interesting to see that the evolutionist scientist Professor Ali Demirsoy accepts this sort of irrational proposition:

In essence, the probability of the formation of a cytochrome-C sequence is as likely as zero. That is, if life requires a certain sequence, it can be said that this has a probability likely to be realized once in the whole universe. Otherwise some **metaphysical powers** beyond our definition must have

acted in its formation. **To accept the latter is not appropriate for the scientific cause.** We thus have to look into the first hypothesis.<sup>394</sup>

Demirsoy writes that he prefers the impossible, in order not to have to accept supernatural forces—in other words, the existence of a Creator. However, the aim of science is not to avoid accepting the existence of supernatural forces. Science can get nowhere with such an aim. It should simply observe nature, free of all prejudices, and draw conclusions from these observations. If these results indicate that there is planning by a supernatural intelligence, then science must accept the fact.

Under close examination, what they call the "scientific cause" is actually the materialist dogma that only matter exists and that all of nature can be explained by material processes. **This is not a "scientific cause," or anything like it; it is just materialist philosophy.** This philosophy hides behind such superficial words as "scientific cause" and obliges scientists to accept quite unscientific conclusions. Not surprisingly, when Demirsoy cites another subject—the origins of the mitochondria in the cell—he openly accepts chance as an explanation, even though it is "quite contrary to scientific thought":

The heart of the problem is how the mitochondria have acquired this feature, because attaining this feature by chance even by one individual, requires extreme probabilities that are incomprehensible... The enzymes providing respiration and functioning as a catalyst in each step in a different form make up the core of the mechanism. A cell has to contain this enzyme sequence completely, otherwise it is meaningless. **Here, despite being contrary to biological thought,** in order to avoid a more dogmatic explanation or speculation, **we have to accept,** though reluctantly, that all the respiration enzymes completely existed in the cell before the cell first came in contact with oxygen.<sup>395</sup>

The conclusion to be drawn from such pronouncements is that evolution is not a theory arrived at through scientific investigation. On the contrary, the form and substance of this theory were dictated by the requirements of materialistic philosophy. It then turned into a belief or dogma in spite of concrete scientific facts. Again, we can clearly see from evolutionist literature that all of this effort has a "purpose"—and that purpose precludes any belief that living things were not created, no matter what the price.

## Coming to Terms with the Shocks

As we recently stressed, materialism is the belief that categorically rejects the existence of the nonmaterial (or the "supernatural"). Science, on the other hand, is under no obligation to accept such a dogma. The duty of science is to observe nature and produce results. If these reveal that nature was created, science has to accept the fact.

And science does reveal the fact that living things were created. This is something demonstrated by scientific discoveries, which we may call "**design.**" When we examine the fantastically complex structures in living things, we see that they possess such extraordinary design features that they can never be accounted for by natural processes and coincidences. Every instance of design is evidence for an intelligence; therefore, we must conclude that life, too, was designed by an intelligence. Since this intelligence is not present in matter, it must belong to a nonmaterial wisdom—a superior wisdom, an infinite power, that rules all of nature... In short, life and all living things were created. This is not a dogmatic belief like materialism, but the result of scientific observation and experiment.

We see that this conclusion comes as a terrible shock for scientists who are used to believing in materialism, and that materialism is a science. See how this shock is described by Michael Behe, one of the most important scientists to stand against the theory of evolution in the world today:

The resulting realization that life was designed by an intelligence is a shock to us in the twentieth century who have gotten used to thinking of life as the result of simple natural laws. But other centuries have had their shocks, and there is no reason to suppose that we should escape them.<sup>396</sup>

Mankind has been freed from such dogmas as that the world is flat, or that it is the center of the universe. And it is now being freed from the materialist and evolutionist dogma that life came about by itself.

The duty that befalls a true scientist in this respect, is to do away with materialist dogma and evaluate the origin of life and living things with the honesty and objectivity befitting a real scientist. A real scientist must come to terms with the "shock," and not tie himself to outdated nineteenth-century dogmas and defend impossible scenarios.

# CONCLUSION

**T**hroughout this book we have examined the scientific evidence for the origin of life, and what emerges clearly demonstrates that life was not the result of chance, as claimed by Darwinism and materialist philosophy in general. Living species could not have evolved from one another through a string of coincidences. On the contrary, all living things were independently and flawlessly created. As the twenty-first century dawns, science offers but one answer to the question of the origin of life: Creation.

The important thing is that science has confirmed the truth which religion has been witness to from the dawn of history to the present day. God created the universe and all the living things in it from nothing. And it was God who created man from nothing and blessed him with countless characteristics. This truth has been sent down to man since the dawn of time by prophets, and revealed in holy books. Every prophet has told the communities he addressed that God created man and all living things. The Bible and the Qur'an all tell of the news of creation in the same way.

In the Qur'an, God announces in a number of verses that it was He who created the universe and all the living things in it from nothing, and flawlessly ordered them. In this verse, it is declared that the universe and everything in it was created:

**Your Lord is God, who created the heavens and the earth in six days and then settled Himself firmly on the Throne. He covers the day with the night, each pursuing the other urgently; and the sun and moon and stars are subservient to His command. Both creation and command belongs to Him. Blessed be God, the Lord of all the worlds. (Qur'an, 7: 54)**

Just as God created everything that exists, so he created the world we live in today, and made it capable of supporting life. This fact is revealed in certain verses:

**As for the earth, We stretched it out and cast firmly embedded mountains in it and made everything grow in due proportion on it. And We put livelihoods in it both for you and for those you do not provide for. (Qur'an, 15: 19-20)**

**And the earth: how We stretched it out and cast firmly embedded mountains onto it and caused luxuriant plants of every kind to grow in it. (Qur'an, 50: 7-8)**

The above verses announce that all plants were created by God. All plants, known and unknown, all trees, grasses, fruit, flowers, seaweed and vegetables were created by God.

And the same thing applies to animals. All of the millions of different animal species that live, or have ever lived, on earth, were created by God. Fish, reptiles, birds, mammals, horses, giraffes, squirrels, deer, sparrows, eagles, dinosaurs, whales, and peacocks were all created from nothing by God, the Lord of infinite art and knowledge. God's creation of the different species of living things is mentioned in a number of verses:

**God created every animal from water. Some of them go on their bellies, some of them on two legs, and some on four. God creates whatever He wills. God has power over all things. (Qur'an, 24: 45)**

**And He created livestock. There is warmth for you in them, and various uses and some you eat. (Qur'an, 16: 5)**

And God created man in exactly the same way. It is revealed in the Qur'an that Adam, the first man, was created from mud, and then all subsequent people came into existence from each other by a simple liquid (sperm). Furthermore, man had a soul breathed into him, unlike all the other species in the world. The Qur'an has this to say about the truth of the creation of man:

**He who has created all things in the best possible way. He commenced the creation of man from clay; then produced his seed from an extract of base fluid. (Qur'an, 32: 7-9)**

### **Man's Duty**

As we made clear at the start, science has confirmed the truth of creation, as handed down in the Qur'an, because scientific discoveries

show that living things possess extraordinary design, and that they were brought into existence by a superior intelligence and knowledge. Biological observations show that one living species cannot turn into another, and that for that reason, if one could go back in time, one would eventually come across, for each species, the first individuals that ever existed and that were created from nothing. For example, since eagles have always been eagles, if we could go back in time, we would arrive at the first pair, or group, of eagles who were created from nothing. In fact, the fossil record confirms this, and shows that different living species suddenly emerged with all their particular, individual features. These living things may have been created at different points in time and settled in different parts of the world, but this all happened through the will of God.

In short, science confirms the proof we have considered that living things were all created by God.

However, science goes no further than that. It is the Qur'an, the book that has come down to us from God, that introduces us to the essence of God and is the sole source of truth on every subject that tells us why we were created and what the reason for our lives is.

The Qur'an says that the reason for our creation is so that we might know God, our Lord, and serve Him. In one verse, He says, "**I only created jinn and man to worship me.**" (Qur'an, 51: 56) The duty falling to everyone who grasps the truth of creation is to live in accordance with that verse, and to say, "**Why indeed should I not worship Him who brought me into being, Him to Whom you will be returned?**" (Qur'an, 36: 22), like every believer, as described in the Qur'an.

As for those who still deny God and the truth of creation, despite all the evidence before their eyes, their minds have been conquered by their own pride. One of God's holy verses describes how helpless and powerless these individuals really are:

**Mankind! an example has been made, so listen to it carefully. Those whom you call upon besides God are not even able to create a single fly, even if they were to join together to do it. And if a fly steals something from them, they cannot get it back. How feeble are both the seeker and the sought! (Qur'an, 22: 73)**

# WARNING !

**The chapter you are now about to read reveals a crucial secret of your life. You should read it very attentively and thoroughly for it is concerned with a subject that is liable to make a fundamental change in your outlook on the external world. The subject of this chapter is not just a point of view, a different approach, or a traditional philosophical thought: it is a fact which everyone, believing or unbelieving, must admit and which is also proven by science today.**

# THE SECRET BEYOND MATTER

The concept of "the nature of matter" is one liable to change one's outlook on life, and indeed, one's whole life, once its essence is known. This subject is directly related to the meaning of your life, your expectations from the future, your ideals, passions, desires, plans, the concepts you esteem, and the material things you possess.

The subject matter of this chapter, "the nature of matter," is not a subject raised today for the first time. Throughout the history of humanity, many thinkers and scientists have discussed this concept. Right from the start, people have been divided into two groups on this issue; one group, known as materialists, based their philosophies and lives on the substantial existence of matter and lived by deceiving themselves. Another group acted sincerely, and being unafraid of thinking more profoundly, led their lives by grasping the essence of the "things" to which they were exposed and the deep meaning lying beyond them. However, advances in the science and technology of our age have finally ended this controversy by indisputably proving the self-evident fact that matter has no substantial existence.

## **The Long Discussed Question:**

### **What is the Real Nature of Matter?**

Someone who conscientiously and wisely contemplates the universe he inhabits, the galaxies, the planets, the balance therein, the willpower in the structure of the atom, the order he comes across in every part of the universe, the countless living species around him, the way they live, their amazing traits, and finally his own body, will instantly realize that there is

something extraordinary about all these things. He will readily understand that this perfect order and the subtleties around him could not have originated by themselves, but must certainly have had a Creator. As a matter of fact, Darwinism and the materialist philosophy which deny creation are great errors as we have analysed throughout this book.

By Whom then were all these things created?

It is obvious that "the fact of creation," which is self-evident in every domain of the universe, cannot be an outcome of the universe itself. For example, a peacock, with its coloring and design implying a matchless art, cannot have created itself. The miniscule equilibriums in the universe cannot have created or organized themselves. Neither plants, humans, bacteria, erythrocytes (red-blood corpuscles), nor butterflies can have created themselves. Moreover, the possibility that all these entities could have originated "by chance" is not even imaginable.

It is evident that everything that we see has been created, but none of the things we see can themselves be "creators." The Creator is different from and superior to all that we see with our eyes. He is invisible, but everything He has created reveals His existence and attributes.

This is the point at which those who deny the existence of God demur. Such people have been conditioned not to believe in His existence unless they see Him with their eyes. In their view, there is a heap of matter throughout the whole universe, spreading out until eternity and God is nowhere in this heap of matter. Even if they traveled thousands of light years, they think they would not meet God. This is why they deny His existence. Therefore, these people, who disregard the fact of "creation," are forced to reject the actuality of "creation" manifest throughout the universe and try to prove that the universe and the living things in it have not been created. However, it is impossible for them to do this, because every corner of the universe overflows with the evidence of God's being.

The basic mistake of those who deny God is shared by many people who do not really deny the existence of God but have a wrong perception of Him. They do not deny the signs of "creation" which are everywhere manifest but have superstitious beliefs about "where" God is. Most of them think that God is up in the "sky." They tacitly and wrongly imagine that God is behind a very distant planet and interferes with "worldly affairs" once in a while, or perhaps does not intervene at all. They imagine that He

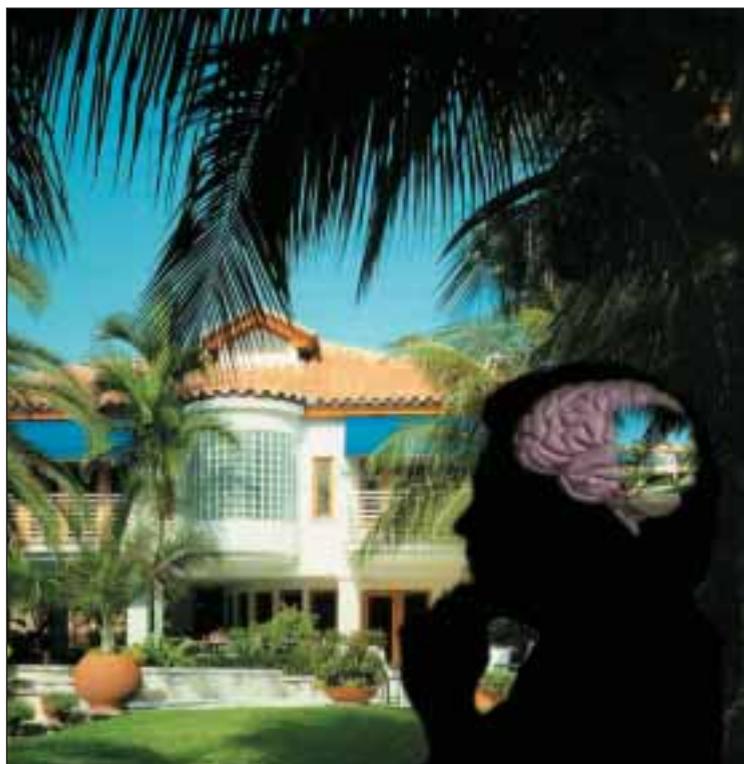
created the universe and then left it to itself, leaving people to determine their fates for themselves.

Still others have heard the fact stated in the Qur'an that God is "everywhere," but they cannot conceive of what exactly this means. In accordance with the distorted thought in their subconscious, they think that God surrounds everything—like radio waves or like an invisible, intangible gas.

However, this and other beliefs that are unclear about "where" God is (and maybe because of that deny Him) are all based on a common mistake. They are prejudiced without reason and so are liable to have wrong opinions of God.

What is this prejudice?

This prejudice is about the nature and characteristics of matter. Man is so conditioned in his suppositions about the existence of matter that he never thinks about whether it does or does not exist, or whether it is only a shadow. Modern science demolishes this prejudice and discloses a very



**Impulses from an object are converted into electrical signals and cause an effect in the brain. When we "see," we in fact view the effects of these electrical signals in our mind. Whatever we see, hear, know, recognize or, get used to in this world throughout our lives is merely comprised of electrical signals our sense organs transmit to our brain.**

important and revealing reality. In the following pages, we will clarify this great reality to which the Qur'an points.

### **We Live in a Universe Presented to Us by Our Perceptions**

According to Albert Camus, you can grasp and count happenings through science, but you cannot grasp the universe. Here is the tree, you feel its hardness; here is the water, you taste it. Here is the wind, it cools you. You have to be satisfied with all that.<sup>397</sup>

All the information that we have about the realness of the world in which we live is conveyed to us by our five senses. The world we know of consists of what our eyes see, our hands feel, our noses smell, our tongues taste, and our ears hear. We never think that the "external world" could be anything other than that which our senses present to us, as we have been dependent solely on those senses since birth.

Modern research in many different fields of science points to a very different fact and creates serious doubt about our senses and the world that we perceive with them.

According to scientific findings, what we perceive as "the external world," is only the result of the brain being stimulated by the electrical signals sent to it by our sense organs. The multi-hued colors you perceive with your sense of sight, the feeling of hardness or softness conveyed by your sense of touch, the tastes you experience on your tongue, the different notes and sounds you hear with your ear, the variety of scents you smell, your work, your home, all your possessions, the lines of this book, and moreover, your mother, your father, your family, the whole world you have always seen, known, got used to throughout your life, are comprised purely and simply of electrical signals sent by your sense organs to the brain. Though this seems difficult on the first analysis, this is a scientific fact. The views of renowned philosophers like Bertrand Russell and L. Wittgeinstein on this subject are as follows:

For instance, whether a lemon truly exists or not and how it came to exist cannot be questioned or investigated. A lemon consists merely of a taste sensed by the tongue, an odor sensed by the nose, a color and shape sensed by the eye; and only these features of it can be subject to examination and



Bundles of light coming from an object fall on the retina upside-down. Here, the image is converted into electrical signals and transmitted to the center of vision at the back of the brain. Since the brain is insulated from light, it is impossible for light to reach the center of vision. This means that we view a vast world of light and depth in a tiny spot that is insulated from light. Even at the moment when we feel the light and heat of a fire, the inside of our brain is pitch dark and its temperature never changes.

assessment. Science can never know the physical world.<sup>398</sup>

Frederick Vester explains the point that science has reached on this subject:

The statements of certain scientists that "man is an image, everything experienced is temporary and deceptive, and this universe is a shadow," seem to be proven by science in our day.<sup>399</sup>

The thoughts of the famous philosopher, George Berkeley, on the subject can be summarized like this:

We believe in the existence of objects just because we see and touch them, and they are reflected to us by our perceptions. However, our perceptions are only ideas in our mind. Thus, objects we captivate by perceptions are nothing but ideas, and these ideas are essentially in nowhere but our mind... Since all these exist only in the mind, then it means that we are beguiled by deceptions when we imagine the universe and things to have an existence outside the mind. So, none of the surrounding things have an existence out of our mind.<sup>400</sup>

In order to clarify the subject, let us consider our sense of sight, which provides us with the most extensive information about the external world.

## How Do Our Sense Organs Work?

Few people think deeply on how the act of seeing takes place. Everyone answers the question "How do we see?" by saying "with our eyes for sure." However, when we look at the technical explanation of the process of seeing, it seems that that is not the case. The act of seeing is realized progressively. Light clusters (photons) travel from the object to the eye and pass through the lens at the front of the eye where they are refracted and fall upside down on the retina at the back of the eye. Here, impinging light is turned into electrical signals that are transmitted by neurons to a tiny spot called the centre of vision in the back of the brain. The act of seeing actually takes place in this tiny spot in the posterior part of the brain, which is pitch-dark and completely insulated from light.

Now, let us reconsider this seemingly ordinary and unremarkable process. When we say, "we see," we are, in fact, seeing the effects of impulses reaching our eyes and induced in our brain, after they are transformed into electrical signals. That is, when we say, "we see," we are actually observing the aggregate of the electrical signals in our mind. Therefore, seeing is not a process terminating in the eye; our eye is only a sense organ serving as a means in the process of seeing.

All the images we view in our lives are formed in our center of vision, in the size of a nut, which only comprises a few cubic centimeters of the volume of the brain. Both the book you are now reading, and the screen of your computer, and the boundless landscape you see when you gaze at the horizon, and the seamless sea, and a crowd of people who participate in a marathon, fit into this tiny space. Another point that has to be kept in mind is that, as we have noted before, the brain is insulated from light; its inside is absolutely dark. The brain has no contact with light itself. The place called the center of vision is a place which is pitch-dark, where light never reaches, so dark that maybe you have never been somewhere like it before. However, you watch a bright, multi-colored world in this complete darkness. A multi-colored nature, a glowing landscape, all tones of green, the colors of fruits, the patterns on flowers, the brightness of the sun, all the people in a crowded street, vehicles moving fast in the traffic, hundreds of clothes in a shopping mall, and everything else are all images formed in this pitch dark place. Even the formation of colors in this darkness has still not been discovered. Klaus Budzinski comments:

... Chromatists cannot answer the question of how the network in the eye that perceives light as well as colours transmits this information to the brain through sight nerves and what kind of physical-physiological stimulations this creates in the brain.<sup>401</sup>

We can explain this interesting situation with an example. Let us suppose that in front of us there is a burning candle. We can sit opposite this candle and watch it at length. However, during this period, our brain never has any direct contact with the original light of the candle. Even as we feel the heat and light of the candle, the inside of our brain is completely dark and its temperature never changes. We watch a colorful and bright world inside our dark brain.

The same is true of sunlight. Your eye's being dazzled in sunlight or your feeling the scorching heat on your skin does not change the fact that these are mere perceptions and the center of vision in your brain is completely dark.

R. L. Gregory gives the following explanation about the miraculous aspects of seeing — something that we take so much for granted:

We are so familiar with seeing, that it takes a leap of imagination to realize that there are problems to be solved. But consider it. We are given tiny distorted upside-down images in the eyes, and we see separate solid objects in surrounding space. From the patterns of simulation on the retinas we perceive the world of objects, and **this is nothing short of a miracle.**<sup>402</sup>

The same situation applies to all our other senses. Sound, touch, taste, and smell are all perceived as electrical signals in the brain.

The sense of hearing works in a similar manner to that of sight. The outer ear picks up sounds by the auricle and directs them to the middle ear. The middle ear transmits the sound vibrations to the inner ear and intensifies them. The inner ear translates the vibrations into electrical signals, which it sends into the brain. Just as with the eye, the act of hearing finally takes place in the center of hearing in the brain.

What is true of the eye is also true of the ear, that is, the brain is insulated from sound just as it is from light. Therefore, no matter how noisy it is outside, the inside of the brain is completely silent. Nevertheless, even the subtlest sounds are perceived in the brain. This process is so precise that the ear of a healthy person hears everything without any atmospheric noise or interference. In your brain, which is

insulated from sound, and where there is dead silence, you listen to the symphonies of an orchestra, hear all the noises of a crowded place, and perceive all the sounds within a wide frequency range, from the rustling of a leaf to the roar of a jet plane. However, if the sound level in your brain were to be measured by a sensitive device at that moment, it would be seen that complete silence prevailed within it.

Our perception of odor works in a similar way. Volatile molecules emitted by things such as vanilla or a rose reach the receptors in the delicate hairs in the epithelial region of the nose and become involved in an interaction. This interaction is transmitted to the brain as electrical signals and perceived as smell. Everything that we smell, be it pleasant or unpleasant, is nothing but the brain's perception of the interactions of volatile molecules after they have been transformed into electrical signals. You perceive the scent of a perfume, a flower, a food that you like, the sea, or other odors you like or dislike, in your brain. The molecules themselves never reaches the brain. Just as with sound and vision, what reaches your brain as you sense an odor is simply a set of electrical signals. In other words, all the odors that you have assumed—since you were born—to belong to external objects are just electrical signals that you experience through your sense organs. Berkeley also said:

At the beginning, it was believed that **colours, odours**, etc., "really exist," but subsequently such views were renounced, and it was seen that **they only exist in dependence on our sensations**.<sup>403</sup>

Similarly, there are four different types of chemical receptors in the front part of a human being's tongue. These pertain to the four tastes: salty, sweet, sour, and bitter. Our taste receptors transform these perceptions into electrical signals through a chain of chemical processes and transmit them to the brain. These signals are perceived as taste by the brain. The taste you experience when you eat a chocolate bar or a fruit that you like is the interpretation of electrical signals by the brain. You can never reach the object in the external world; you can never see, smell or taste the chocolate itself. For instance, if the taste nerves that travel to the brain were cut, the taste of things you ate would not reach your brain; you would completely lose your sense of taste.

At this point, we come across another fact:

We can never be sure that what we experience when we taste a food

and what another person experiences when he tastes the same food, or what we perceive when we hear a voice and what another person perceives when he hears the same voice are the same. Lincoln Barnett says that **no one can know whether another person perceives the color red or hears the note C in same way as does he himself.**<sup>404</sup>

We only know as much as our sense organs relate to us. It is impossible for us to reach the physical reality outside us directly. It is again the brain that interprets it. We can never reach the original. Therefore, even when we talk about the same thing, others' brains may be perceiving something different. The reason for this is that what is perceived depends on the perceiver.

The same logic applies to our sense of touch. When we touch an object, all information that will help us recognize the external world and the objects in it is transmitted to the brain by the sense nerves on the skin. The feeling of touch is formed in our brain. Contrary to general belief, the place where we perceive the sense of touch is not at our fingertips, or on our skins, but at the center of touch perception in our brains. Because of the brain's interpretation of the electrical stimuli coming to it from objects, we experience those objects differently, e.g. they may be hard or soft, hot or cold. We derive all the details that help us recognize an object from these stimuli. The renowned philosopher Bertrand Russell comments in relation to this:

**As to the sense of touch when we press the table with our fingers, that is an electric disturbance on the electrons and protons of our fingertips, produced, according to modern physics, by the proximity of the electrons and protons in the table.** If the same disturbance in our finger-tips arose in any other way, we should have the sensations, in spite of there being no table.<sup>405</sup>

That the outside world can be identified completely through the senses is a scientific fact. In his book, *A Treatise Concerning the Principles of Human Knowledge*, George Berkeley comments as follows:

By sight I have the ideas of light and colours, with their several degrees and variations. By touch I perceive hard and soft, heat and cold, motion and resistance. ...Smelling furnishes me with odours; the palate with tastes; and hearing conveys sounds. ...And as several of these are observed to accompany each other, they come to be marked by one name, and so to be reputed as one thing. Thus, **for example, a certain colour, taste, smell, figure**

**and consistence having been observed to go together, are accounted one distinct thing, signified by the name apple;** other collections of ideas constitute a stone, a tree, a book, and the like sensible things. . .<sup>406</sup>

Therefore, by processing the data in the centers of vision, sound, smell, taste and touch, our brains, throughout our lives, do not confront the "original" of the matter existing outside us but rather the copy formed inside our brain. It is at this point that we are misled by assuming these copies are instances of the real matter outside us. However, as seen throughout the book, there are also thinkers and scientists who have not been misled by such a misconception, and who have realized this fact.

Even Ali Demirsoy, one of the most famous Turkish materialists, also confessed this truth:

**In truth, there is neither light as we see it, nor sound as we hear it, nor heat as we sense it in the universe.** Our sense organs mislead us between the external world and brain and give rise to interpretations which are irrelevant to reality in the brain.<sup>407</sup>

### **Do We Spend Our Entire Life in Our Brains?**

From the physical facts described so far, we may conclude the following. Everything we see, touch, hear, and perceive as "matter," "the world" or "the universe" is only electrical signals occurring in our brain. Therefore, someone drinking an orange juice does not confront the actual drink but its perception in the brain. The object considered by the onlooker to be a "drink" actually consists of electrical impressions of the orange color, sweet taste, and liquid feeling of the orange juice in the brain. The situation is no different while eating chocolate; the electrical data pertaining to the shape, taste, odor, and hardness of the chocolate are perceived in the brain. If the sight nerves traveling to the brain were suddenly to be severed, the image of the chocolate would just as suddenly disappear. A disconnection in the nerve traveling from the sensors in the nose to the brain would completely interrupt the sense of smell.

Put simply, the tree that you see, the objects you smell, the chocolate you taste, and the orange juice you drink are nothing but the brain's interpretation of electrical signals.

Another point to be considered, which might be deceptive, is the

**sense of distance.** For example, the distance between you and this book is only a feeling of space formed in your brain. Objects that seem to be distant from the human viewpoint also exist only in the brain. For instance, someone who watches the stars in the sky assumes that they are millions of light-years away from him. Yet, what he "sees" are really the stars inside himself, in his center of vision. During a trip, one looks at the city below from a plane and thinks that it is kilometers away from him. However, the whole length and breadth of the city are inside one's brain along with all the people in it.

Today, all scientific data prove that the image we perceive is formed in our brain.

There is yet another misleading, but very important factor. While you read these lines, you are, in truth, not inside the room you assume yourself to be in; on the contrary, the room is inside you. Your seeing your body makes you think that you are inside it. **However, you must remember that your body, too, is an image formed inside your brain.** Bertrand Russell states the following on the subject:

What we can say, on the basis of physics itself, is that **what we have hitherto called our body is really an elaborate scientific construction not corresponding to any physical reality.**<sup>408</sup>

The truth is very clear. If we can feel the external world only through our sense organs, then there would be no consistent reason for us to consider our body to be separate from the external world, that is, to concede that our body has a separate existence.

Our body is also presented to us by the electrical stimulations (impulses) reaching our brain. These impulses, just like all others, are converted into certain sensations, or feelings in our brain. For instance, the feeling of touch occurring when we touch our body with our hand, the feeling of weight caused by the force of gravity, the feeling of seeing caused by the light rays reflected from our body, etc... all these are assessed as a "collection of feelings" by the brain, and we "feel" our body. As revealed by these scientific facts, throughout our lives, we are exposed not to our original body, but to the impulses reaching our brain pertaining to our body. These impulses are identified as "our body" in our perception.

The same applies to all your other perceptions. For instance, when you think that you hear the sound of the television in the next room, you

are actually experiencing the sound inside your brain. You can prove neither that a room exists next to yours, nor that a sound comes from the television in that room. Both the sound you think to be coming from meters away and the conversation of a person right next to you are perceived in a center of hearing in your brain which is only a few square centimeters in size. Apart from within this center of perception, no concept such as right, left, front or behind exists. That is, sound does not come to you from the right, from the left or from the air; **there is no direction from which sound comes.**

The smells that you perceive are like that too; none of them reaches you from a great distance. You suppose that the end-effects formed in your center of smell are the smell of the objects in the external world. However, just as the image of a rose is in your center of vision, so the smell of the rose is in your center of smell; there is neither a rose nor an odor pertaining to it in the external world.

The same facts hold true also for heat. One of the foremost philosophers of his age, George Berkeley, clarifies with the following example that senses like coldness and hotness cannot be judged to exist outside the mind:

**Suppose now one of your hands hot, and the other cold, and that they are both at once put into the same vessel of water, in an intermediate state; will not the water seem cold to one hand, and warm to the other?**<sup>409</sup>

Berkeley is right in his analysis. Had heat or cold been present in the matter itself, both hands would have felt the same thing.

The "external world" presented to us by our perceptions is merely a collection of electrical signals reaching our brains. Throughout our lives, our brains process and interpret these signals and we live without recognizing that we are mistaken in assuming that these are the **original** versions of things existing in the "external world." We are misled **because we can never reach these entities themselves by means of our senses.** This point is extremely important.

Moreover, again our brains interpret and attribute meaning to signals that we assume to be the "external world." For example, let us consider the sense of hearing. Our brains transform the sound waves in the "external world" into a rhythm. That is to say, music is also a perception created by our brains. In the same manner, when we see colors, what reaches our eyes

is merely a set of electrical signals of **different wavelengths**. Again our brains transform these signals into colors. **There are no colors in the "external world."** Neither is the lemon yellow, nor is the sky blue, nor are the trees green. They are as they are just because we perceive them to be so. The "external world" depends entirely on the perceiver. Color blindness is important evidence for this. Even the slightest defect in the retina of the eye causes color blindness. Some people perceive blue as green, and some red as blue. At this point, it does not matter whether the object externally is colored or not.

According to the prominent thinker Berkeley:

If the same things can be red and hot for some and the contrary for others, this means that we are under the influence of misconceptions and that "things" only exist in our brains.<sup>410</sup>

In conclusion, the reason we see objects as colored is not because they are colored or because they have an independent material existence outside ourselves. Had colors existed outside us, a deficiency called color blindness would not have existed. The truth of the matter is rather that all the qualities we ascribe to objects are **inside us and not in the "external world."**

### **Is the Existence of the "External World" Indispensable?**

So far, we have been speaking repeatedly of the existence of a world of perceptions formed in our brains, and making the assertion that we can never actually reach this world. Then, how can we be sure that such a world really exists?

Actually, we cannot. Since each object is only a collection of perceptions and those perceptions exist only in the mind, it is more accurate to say that **the only world that really exists is the world of perceptions**. The only world we know of is the world that exists in our mind: the one that is designed, recorded, and made vivid there; the one, in



The findings of modern physics show that the universe is a collection of perceptions. Thus the well-known science journal *New Scientist* asks: "Beyond Reality: Is the Universe Really a Frolic of Primal Information and Matter Just a Mirage?"

short, that is created within our mind. This is the only world of which we can be sure.

We can never prove that the perceptions we observe in our brain have material correlates. Those perceptions could conceivably be coming from an "artificial" source.

We can visualize this with such an example:

First, let us imagine that we take your brain out of your body and keep it alive artificially in a glass cube. Next to it, let us place a computer with which all kinds of electrical signals can be produced. Then, let us artificially produce and record in this computer the electrical signals of the data related to a setting, such as image, sound, odor, hardness-softness, taste, and body image. This experiment with your brain, which we have taken out of your body, will be carried out on the peak of a deserted mountain. Finally, let us connect the computer to the brain with electrodes that will function as nerves and send the pre-recorded data to your brain which is now high above the clouds. As your brain (which is literally you) perceives these signals, it will see and experience the corresponding setting. For instance, let us suppose that every detail that comes to mind about a football match in a stadium be produced or recorded—in a way to be perceived through the sense organs. In your brain, all by itself at the summit of the mountain, with this recording instrument connected to it, you would feel as if you were living in this artificially created setting. You would think that you were at the match. You would cheer, you would sometimes get angry and sometimes be pleased. Moreover, you would often bump into other people because of the crowd, and therefore feel their existence, too. Most interestingly, everything would be so vivid that you would never doubt the existence of this setting or your body. Or if we sent to your brain the electrical correlates of senses such as seeing, hearing, and touching which you perceive while sitting at a table, your brain would think of itself as a businessman sitting in his office. This imaginary world will continue so long as the stimulations keep coming from the computer. It will never become possible to understand that you consist of nothing but your brain. This is because what is needed to form a world within your brain is not the existence of a real world but rather the stimuli. It is perfectly possible that these stimuli could be coming from an artificial source, such as a recording device or a different kind of perception source.

Experiments carried out about this subject demonstrate this fact.

In the U.S.A., Dr. White from Cleveland Hospital, along with his colleagues, all experts in electronics, performed a great feat in making "Cyborg" survive. What Dr. White succeeded in doing was isolating an ape's brain from his skull and feeding it with oxygen and blood. The brain, which was connected to an artificially produced "Heart Lung Machine," was kept alive for five hours. **The device, called an Electro Encephalogram, to which the isolated brain was connected, identified in E.E.G. records that the noises made in the surroundings were heard by this brain and that it reacted to them.**<sup>411</sup>

As we have seen, it is quite possible that we perceive an external world through externally given artificial stimuli. The symbols you would perceive with your five senses are sufficient for this. Other than these symbols, there is nothing left of the external world.

It is indeed very easy for us to be misled into believing perceptions, without any material correlates, to be real. We often experience this feeling in our dreams, in which we experience events, see people, objects and settings that seem completely real. However, they are all, without exception, mere perceptions. There is no basic difference between the "dream" and the "real" world; both of them are experienced in the brain.

### **Who Is the Perceiver?**

As we have related so far, there is no doubt that the world we think we inhabit and know as the "external world" is perceived inside our brain. However, here arises the question of primary importance. Is the will that perceives all these perceptions the brain itself?

When we analyze the brain, we see that it is comprised of lipid and protein molecules, which also exist in other living organisms. As is well known, the essence of these proteins is, in fact, atoms. This means that within the piece of meat we call our "brain," there is nothing to observe the images, to constitute consciousness, or to create the being we call "myself."

R. L. Gregory refers to a mistake people make in relation to the perception of images in the brain:

There is a temptation, which must be avoided, to say that the eyes produce pictures in the brain. A picture in the brain suggests the need of some kind

of internal eye to see it—but this would need a further eye to see its picture... and so on, in an endless regress of eyes and pictures. This is absurd.<sup>412</sup>

This is the very point that puts materialists, who do not hold anything but matter to be true, in a quandary: to whom belongs "the eye inside" that sees, that interprets what it sees and reacts?

Karl Pribram also focused on this important question, about who the perceiver is, in the world of science and philosophy:

Philosophers since the Greeks have speculated about the "ghost" in the machine, the "little man inside the little man" and so on. **Where is the I—the entity that uses the brain? Who does the actual knowing?** Or, as Saint Francis of Assisi once put it, "What we are looking for is what is looking."<sup>413</sup>

Now, think of this: The book in your hand, the room you are in, in brief, all the images in front of you are seen inside your brain. Is it the atoms that see these images? Blind, deaf, unconscious atoms? How would lifeless and unconscious atoms feel, how would they see? Why did some atoms acquire this quality whereas others did not? Do our acts of thinking, comprehending, remembering, being delighted, being unhappy, and everything else consist of the electrochemical reactions between these atoms? No, the brain cannot be the will that performs all of these.

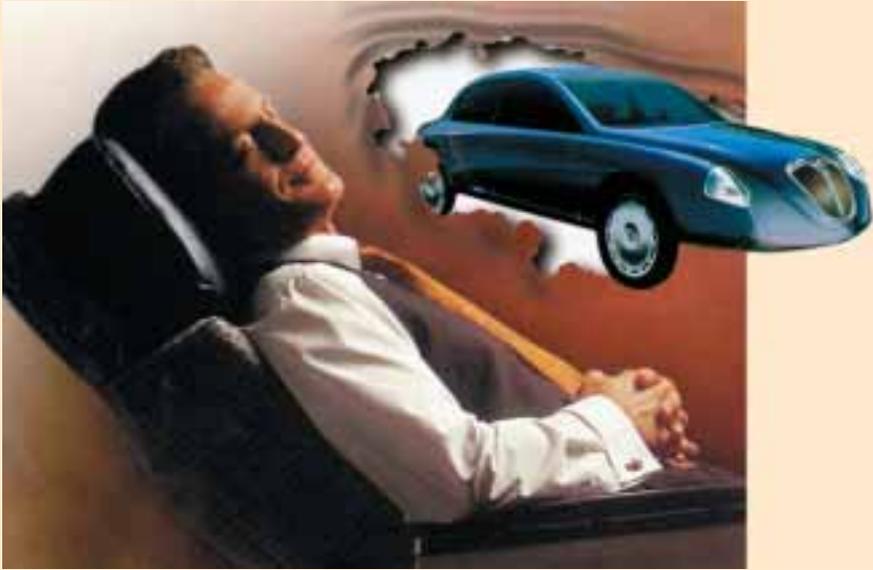
In previous sections, we have pointed out that our body is also included in the collection of perceptions we call the "external world." Therefore, since our brain is also a part of our body, it is also a part of that collection of perceptions. Since the brain itself is a perception, therefore, it cannot be the will that perceives other perceptions.

In his book, *The ABC of Relativity*, Bertrand Russell focuses attention on this subject by saying:

**Of course, if matter in general is to be interpreted as a group of occurrences, this must apply also to the eye, the optic nerve and the brain.**<sup>414</sup>

It is clear that the being that sees, hears, senses, and feels is a supra-material being. For matter cannot think, feel, be happy or unhappy. It is not possible to do all these with the body alone. Therefore, this being is neither matter, nor image, but it is "alive." This being relates to the "screen" in front of it by using the image of our body.

An example about dreams will illuminate the subject further. Let us imagine (in accordance with what has been said so far) that we see the



## THE WORLD IN DREAMS

For you, reality is all that can be touched with the hand and seen with the eye. In your dreams you can also "touch with your hand and see with your eye", but in reality, you have neither hand nor eye, nor is there anything that can be touched or seen. There is no material reality that makes these things happen except your brain. You are simply being deceived.

What is it that separates real life and the dreams from one another? Ultimately, both forms of life are brought into being within the brain. If we are able to live easily in an unreal world during our dreams, the same thing can equally be true for the world we live in. When we wake up from a dream, there is no logical reason for not thinking that we have entered a longer dream that we call "real life". The reason we consider our dream to be fancy and the world as real is nothing but a product of our habits and prejudices. This suggests that we may well be awoken from the life on earth which we think we are living right now, just as we are awoken from a dream.

dream within our brain. In the dream, we will have an imaginary body, an imaginary arm, an imaginary eye, and an imaginary brain. If during our dream, we were asked, "Where do you see?" we would answer, "I see in my brain." If we were asked where our brain is and what it looks like, we would hold our imaginary head on our imaginary body with our imaginary hand and say, "My brain is a hunk of meat in my head weighing hardly more than a kilo."

Yet, actually there is not any brain to talk about, but an imaginary head and an imaginary brain. The seer of the images is not the imaginary

brain in the dream, but a "being" that is far "superior" to it.

We know that there is no physical distinction between the setting of a dream and the setting we call real life. So when we are asked in the setting we call real life the above question: "Where do you see?" it would be just as meaningless to answer "in my brain" as in the example above. In both conditions, the entity that sees and perceives is not the brain, which is after all only a hunk of meat. Realizing this fact, Bergson said in his book, *Matter and Memory*, in summary, that **"the world is made up of images, these images only exist in our consciousness; and the brain is one of these images."**<sup>415</sup>

Therefore, since the brain is a part of the external world, there has to be a will to perceive all these images. **This being is the "soul."**

The aggregate of perceptions we call the "material world" is nothing but a dream observed by this soul. Just as the bodies we possess and the material world we see in our dreams have no reality, the universe we occupy and the bodies we possess also have no material reality. The famous British philosopher David Hume expresses his thoughts on this fact:

For my part, when I enter most intimately into what I call myself, I always stumble on some particular perception or other, of heat or cold, light or shade, love or hatred, pain or pleasure. **I never can catch myself at any time without a perception, and never can observe any thing but the perception.**<sup>416</sup>

The real being is the soul. Matter consists merely of perceptions viewed by the soul. The intelligent beings that write and read these lines are not each a heap of atoms and molecules and the chemical reactions between them, but a "soul."

### **The Real Absolute Being**

All these facts bring us face to face with a very significant question. If the thing we acknowledge to be the material world is merely comprised of perceptions seen by our soul, then what is the source of these perceptions?

In answering this question, we must consider the following: matter does not have a self-governing existence by itself. Since matter is a perception, it is something "artificial." That is, this perception must have been caused by another power, which means that it must have been

created. Moreover, this creation must be continuous. If there were not a continuous and consistent creation, then what we call matter would disappear and be lost. This may be likened to a television screen on which a picture is displayed as long as the signal continues to be broadcast. So, who makes our soul see the stars, the earth, plants, people, our bodies, and all else that we see?

It is very evident that there is a Creator, Who has created the entire material universe, that is, the sum of perceptions, and continues His creation ceaselessly. Since this Creator displays such a magnificent creation, He surely has eternal power and might.

This Creator introduces Himself to us. He sent down a book and through this book has described to us Himself, the universe, and the reason for our existence.

This Creator is God and the name of His book is the Qur'an.

The facts that the heavens and the earth, that is, the universe is not stable, that their presence is only made possible by God's creating them and that they will disappear when He ends this creation, are all explained in a verse as follows:

**It is God Who sustains the heavens and the earth, lest they cease (to function): and if they should fail, there is none—not one—can sustain them thereafter: Truly, He is Most Forbearing and Oft-Forgiving. (Qur'an, 35: 41)**

As we mentioned at the beginning, some people have no genuine understanding of God and so they imagine Him as a being present somewhere in the heavens and not really intervening in worldly affairs. The basis of this logic actually lies in the thought that the universe is an assembly of matter and God is "outside" this material world, in a faraway place.

However, as we have considered so far, matter is composed only of sensations. And the only real absolute being is God. **That means that only God exists; all things except Him are shadow beings.** Consequently, it is impossible to conceive of God as separate and outside this whole mass of matter. For there is actually nothing such as matter in the sense of being. **God is surely "everywhere" and encompasses all.** This reality is explained in the Qur'an as follows;

**God, there is no deity except Him, the Living, the Self-Sustaining.**

**He is not subject to drowsiness or sleep. Everything in the heavens and the earth belongs to Him. Who can intercede with Him except by His permission? He knows what is before them and what is behind them but they cannot grasp any of His knowledge save what He wills. His Footstool encompasses the heavens and the earth and their preservation does not tire Him. He is the Most High, the Magnificent. (Qur'an, 2: 255)**

Since material beings are each a perception, they cannot see God; but God sees the matter He created in all its forms. In the Qur'an, this is stated thus: **"No vision can grasp Him, but His grasp is over all vision."** (Qur'an, 6: 103)

That is, we cannot grasp God's being with our eyes, but God has thoroughly encompassed our inside, outside, looks and thoughts. For this reason, God says that **"He controls hearing and sight"** (Qur'an, 10: 31). We cannot utter a single word without His knowledge, nor can we even take a breath.

While we watch these sensory perceptions in the course of our lives, the closest being to us is not any one of these sensations, but God Himself. The following verse of the Qur'an asserts this reality: **"It is We Who created man, and We know what dark suggestions his soul makes to him: for We are nearer to him than (his) jugular vein."** (Qur'an, 50: 16) When a person thinks that his body is made up only of "matter," he cannot comprehend this important fact. If he takes his brain to be "himself," then the place that he accepts to be the outside is 20-30 cm away from him. According to this reasoning, nothing can be nearer to him than his jugular vein. However, when he understands that there is nothing such as matter, and that everything is imagination, notions such as outside, inside, far or near, lose their meaning. God has encompassed him and He is "infinitely close" to him.

God informs men that He is **"infinitely close"** to them in the verse: **"When My servants ask you about Me, tell them I am indeed close (to them)."** (Qur'an, 2: 186). Another verse relates the same fact: **"We have told you that your Lord encompasses all men."** (Qur'an, 17: 60). However, man is misled in thinking that the being closest to him is himself. God, in truth, is even closer to us than ourselves.

He has called our attention to this point in the verse: **"Why is it that**

**when it (the soul) comes up to the throat, and you at that time look on, We are nearer to him than you, but you do not see this."** (Qur'an, 56: 83-85).

The only conclusion to be derived from the sum total of the facts presented here is that the only and real and absolute being is God. With His knowledge, God encompasses man, who is a shadow being, as well as everything else.

Quite the reverse is true of man, who is nothing but a shadow being, and who is so wholly dependent on God, that it is impossible for him to have any independent power or will: **"You will not will unless God wills."** (Qur'an, 76: 39). Another verse showing that everything we experience takes place under God's control runs: **"God has created you and what you do!"** (Qur'an, 37: 96). In the Qur'an, this reality is stated at many points and with the verse **"You did not throw, when you threw, it was God who threw"** (Qur'an, 8: 17), it is emphasized that no act is independent of God.

This is the reality. The individual may not want to concede this and may think of himself as a being independent of God; but this does not change a thing. Of course his unwise denial is again subject to God's will and desire. In the Qur'an, this fact is addressed thus:

**It is other than the religion of God that you desire, when everything in the heavens and earth, willingly or unwillingly, submits to Him? To Him you will all be returned. (Qur'an, 3: 83)**

## **Conclusion**

The subject we have explained so far is one of the greatest truths that you will ever be told in your lifetime.

You can explore beyond this point by dint of personal reflection. For this, you have to concentrate upon, devote your attention to, and ponder on the way you see the objects around you and the way you feel their touch. If you think heedfully, you can feel that the intelligent being that sees, hears, touches, thinks, and reads this book at this moment is only a soul, who watches the perceptions called "matter" on a screen. One who comprehends this is considered to have moved away from the domain of the material world that deceives a major part of humanity, and to have entered the domain of true existence.

This reality has been understood by a number of theists and philosophers throughout history. Islamic intellectuals such as Imam Rabbani, Muhyiddin Ibn al-'Arabi and Mawlana Jami realized this from the signs of the Qur'an and by using their reason. Some Western philosophers like George Berkeley have grasped the same reality through reason. Imam Rabbani wrote in his *Maktubat* (Letters) that the whole material universe is an "illusion and supposition (perception)" and that the only absolute being is God:

God... The substance of these beings which He created is mere nothingness... He created all in the sphere of senses and illusions... **The existence of the universe is in the sphere of senses and illusions**, and it is not material... In reality, there is nothing on the outside except the Glorious Being, (Who is God).<sup>417</sup>

Mawlana Jami stated the same fact, which he discovered by following the signs of the Qur'an and by using his wit: "All phenomena of the universe are senses and illusions. They are either like reflections in mirrors or shadows."

However, the number of those who have understood this fact throughout history has always been limited. Great scholars such as Imam Rabbani have written that it might not be wise to tell this fact to the masses, because most people are not able to grasp it.

In the age in which we live, this has been established as an empirical fact by the body of evidence put forward by science. The fact that the universe is a shadow being is described for the first time in history in such a concrete, clear, and explicit way.

For this reason, **the twentyfirst century** will be a **historical turning point**, when people will generally comprehend the divine realities and be led in crowds to God, the only Absolute Being. The materialistic creeds of the nineteenth century will be relegated to the trash-heaps of history, God's being and creating will be accepted, spacelessness and timelessness will be understood; humanity, in short, will cast aside the centuries-old veils, deceits and superstitions which have been confusing them.

It is not possible for this unavoidable course to be impeded by any shadow being.

# TIMELESSNESS AND THE REALITY OF FATE

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Everything related so far demonstrates that "three-dimensional space" does not exist in reality, that it is a prejudice completely founded on perceptions and that one leads one's whole life in "spacelessness." For there is no valid proof of the existence of a three-dimensional, material world. The universe we inhabit is a sum of images made up of plays of light and shade. To assert the contrary would be to hold a superstitious belief far removed from reason and scientific truth.

This refutes the primary assumption of the materialist philosophy, the assumption that matter is absolute and eternal. The second assumption, upon which materialistic philosophy rests, is the supposition that time is absolute and eternal. This is as superstitious as the first.

## **The Perception of Time**

What we perceive as time is, in fact, a method by which one moment is compared to another. We can explain this with an example. For instance, when a person taps an object, he hears a particular sound. When he taps the same object five minutes later, he hears another sound. He perceives that there is an interval between the first sound and the second, and he calls this interval "time." Yet at the time he hears the second sound, the first sound he heard is no more than a mental imagining. It is merely a bit of information in his memory. The person formulates the concept of "time" by **comparing the moment in which he lives with what he has in his memory. If this comparison is not made, there can be no concept of time.**

Similarly, the occupant of a room makes a comparison when he sees someone enter through a door and sit in an armchair in the middle of the room. By the time the newcomer sits in the armchair, the images related to

the moments he opens the door, walks into the room, and makes his way to the armchair are compiled as bits of information in his brain. The perception of time occurs when he compares the man sitting in the armchair with those bits of information.

In brief, **time comes to exist as a result of the comparison made between some illusions stored in the brain.** If man did not have memory, his brain would not make such interpretations and he would never therefore have formed the concept of time. The only reason why someone determines himself to be thirty years old is because he has accumulated information pertaining to those thirty years in his mind. If his memory did not exist, then he would not think of the existence of such a preceding period, and he would only experience the single "moment" in which he lives—which is a very important point.

### **The Scientific Explanation of Timelessness**

Let us try to clarify the subject by quoting various scientists' and scholars' explanations of the subject. Regarding the subject of time flowing backwards, the famous intellectual and Nobel laureate professor of genetics, François Jacob, states the following in his book *Le Jeu des Possibles* (The Possible and the Actual):

Films played backwards make it possible for us to imagine **a world in which time flows backwards.** A world in which milk separates itself from the coffee and jumps out of the cup to reach the milk-pan; a world in which light rays are emitted from the walls to be collected in a trap (gravity center) instead of gushing out from a light source; a world in which a stone slopes to the palm of a man by the astonishing cooperation of innumerable drops of water which enable the stone to jump out of water. Yet, in such a world in which time has such opposite features, **the processes of our brain and the way our memory compiles information, would similarly be functioning backwards.** The same is true for the past and future and the world will appear to us exactly as it currently appears.<sup>418</sup>

Since our brain is accustomed to a certain sequence of events, the world does not operate as is related above and we assume that time has always flowed forward. However, this is a decision reached in the brain and is relative. Had the bits of information in our memory been arranged as in films played backwards, for us, the flow of time would be as in these

films played backwards. In this situation, we would start to perceive the past as the future, and the future as the past, and live our lives in a totally opposite sequence.

In reality, we can never know how time flows or even whether it flows or not. This is an indication of **the fact that time is not an absolute fact, but just a sort of perception.**

The relativity of time is a fact also verified by one of the most important physicists of the twentieth century, Albert Einstein. Lincoln Barnett writes in his book *The Universe and Dr. Einstein*:

Along with absolute space, Einstein discarded the concept of absolute time—of a steady, unvarying inexorable universal time flow, streaming from the infinite past to the infinite future. Much of the obscurity that has surrounded the Theory of Relativity stems from man's reluctance to recognize that **sense of time, like sense of colour, is a form of perception.** Just as space is simply a possible order of material objects, so **time is simply a possible order of events.** The subjectivity of time is best explained in Einstein's own words. "The experiences of an individual" he says, "appear to us arranged in a series of events; **in this series the single events which we remember appear to be ordered according to the criterion of 'earlier' and 'later'.** There exists, therefore, for the individual, an I-time, or **subjective time.** This in itself is not measurable. I can, indeed, associate numbers with the events, in such a way that a greater number is associated with the later event than with an earlier one."<sup>419</sup>

The words of Einstein indicate that the idea of a forward-running time is nothing more than conditioning.

Einstein himself pointed out, as quoted in Barnett's book: "Space and time are forms of intuition, **which can no more be divorced from consciousness** than can our concepts of colour, shape, or size." According to the Theory of General Relativity: "**Time has no independent existence apart from the order of events by which we measure it.**"<sup>420</sup>

Since time is based on perception, it depends entirely on the perceiver and is therefore relative.

The speed at which time flows differs according to the references we use to measure it, because there is no natural clock in the human body to indicate precisely how fast time passes. As Lincoln Barnett wrote: "Just as there is no such thing as colour without an eye to discern it, so an instant

or an hour or a day is nothing without an event to mark it."<sup>421</sup>

The relativity of time is plainly experienced in dreams. Although what we see in our dreams seems to last for hours, in fact, it only lasts for a few minutes, and even a few seconds.

Let us think about an example to clarify the subject further. Let us assume that we were put in a room with a single specially designed window and we were kept there for a certain period. A clock in the room would allow us to see the amount of time that had passed. At the same time, we are able to see from the window of the room the sun rising and setting at certain intervals. A few days later, the answer we would give to the question about the length of time we had spent in the room would be based both on the information we had collected by looking at the clock from time to time and on the computation we had made by referring to how many times the sun had risen and set. Suppose, we estimate that we spent three days in the room. However, if the person who put us in that room said that we spent only two days there and that the sun we had seen from the window was produced artificially by a simulation machine and that the clock in the room was regulated specially to work faster, then the calculation we had done would have no meaning.

This example confirms that the information we have about the rate of the passage of time is based on relative references.

In the same manner, the fact that everyone perceives the flowing speed of time differently under different situations is evidence that time is but a psychological perception. For instance, when you have to meet a friend, a 10-minute delay on his part would seem to you like an interminable, or at least a very long time. Or for a sleepless person who has to wake up to go to school or work, an extra ten-minute sleep may seem very long. He may even think that he has had all his sleep in these ten minutes. In some circumstances, just the opposite happens. As you would remember from your school years, after a forty-minute lesson which seems to last for centuries, a ten minutes break may seem to pass very quickly.

The relativity of time is a scientific fact also proven by scientific methodology. **Einstein's Theory of General Relativity** maintains that the speed of time changes depending on the speed of the object and its position in the gravitational field. As speed increases, time is shortened

and compressed: it slows down as if coming to the point of "stopping."

Let us explain this with an example given by Einstein. Imagine twins, one of whom stays on earth while the other goes traveling in space at a speed close to that of light. When he comes back, the traveler will see that his brother has grown much older than he has. The reason is that time flows much more slowly for the person who travels at speeds near the speed of light. The same applies to a father traveling in space in a rocket, the speed of which is close to ninety-nine per cent of the speed of light, and his earth-bound son. If the father were twenty-seven years old when he set out and his son three; when the father came back to earth thirty years later (earth time), the son would be thirty-three years old while his father would be only thirty.<sup>422</sup>

This relativity of time is not caused by the deceleration or acceleration of clocks, or the deceleration of a mechanical spring. It is rather the result of the differentiated operation periods of the entire system of material existence, which goes as deep as sub-atomic particles. In other words, for the person experiencing it, the shortening of time is not experienced as if acting in a slow-motion picture. In such a setting where time shortens, one's heartbeats, cell replications, and brain functions, etc, all operate more slowly. Nevertheless, the person goes on with his daily life and does not notice the shortening of time at all.

These facts revealed by the Theory of Relativity have been verified quite a few times by various scientists. In his book *Frontiers*, Isaac Asimov also states that it is 84 years since the publication of Einstein's Theory of Relativity, and each time the theory has been tested, Einstein has been proved right once again.<sup>423</sup>

## **Relativity in the Qur'an**

The conclusion to which we are led by the findings of modern science is that **time is not an absolute fact as supposed by materialists, but only a relative perception**. What is most interesting is that this fact, undiscovered until the twentieth century by science, was revealed to mankind in the Qur'an fourteen centuries ago. There are various references in the Qur'an to the relativity of time.

It is possible to see in many verses of the Qur'an the scientifically

proven fact that time is a psychological perception dependent on events, setting, and conditions. For instance, a person's entire life is a very short time, as we are informed in the Qur'an:

**On the Day when He will call you, you will answer His Call with words of His Praise and Obedience, and you will think that you have stayed in this world but a little while! (Qur'an, 17: 52)**

**And on the Day when He shall gather them together, it will seem to them as if they had not tarried on earth longer than an hour of a day: they will recognize each other. (Qur'an, 10: 45)**

Some verses indicate that people perceive time differently and that sometimes people can perceive a very short period as a very lengthy one:

**He will say: "What number of years did you stay on earth?" They will say: "We stayed a day or part of a day, but ask those who keep account." He will say: "Brief indeed was your sojourn, if you had only known!" (Qur'an, 23: 112-114)**

In some other verses God states that time may flow at different paces in different settings:

**...Truly, a day in the sight of your Lord is like a thousand years of your reckoning. (Qur'an, 22: 47)**

**The angels and the spirit ascend to Him in a day the measure of which is like fifty thousand years. (Qur'an, 70: 4)**

**He rules all affairs from the heavens to the earth: in the end all will ascend to Him in a single day, the measure of which is a thousand years by your reckoning. (Qur'an, 32: 5)**

These verses are clear expressions of the relativity of time. That this finding, which was only recently understood by scientists in the twentieth century, was communicated to man 1,400 years ago in the Qur'an is an indication of the revelation of the Qur'an by God, Who encompasses the whole of time and space.

Many other verses of the Qur'an reveal that time is a perception. The situation described in the verse below is also evidence that time is in truth a psychological perception.

**Or (take) the instance of one who passed by a hamlet, all desolate**

**and in ruins. He said, "How shall God ever bring it to life now that is dead?" but God caused him to die for a hundred years, then brought him back to life. He said: "How long did you tarry thus?" He said: Perhaps a day or part of a day." He said: "No, you have tarried thus a hundred years; but look at your food and your drink; they show no signs of age; and look at your donkey. And so that We may make of you a sign to the people, look further at the bones, how We bring them together and clothe them with flesh." When this was shown clearly to him, he said: "I know that God has power over all things." (Qur'an, 2: 259)**

The above verse clearly emphasizes that God, Who created time, is unbound by it. Man, on the other hand, is bound by time, which is ordained by God. As in the verse, man is even incapable of knowing how long he has slept. This being so, to assert that time is absolute (just as materialists do in their distorted thinking) is very unreasonable.

## **Destiny**

This relativity of time clears up a very important matter. Relativity is so variable that a period appearing to us to be billions of years' in duration may last only a second in another perspective. Moreover, an enormous period of time, extending from the world's beginning to its end, may not even last a second but just an instant in another dimension.

This is the very essence of the concept of destiny—a concept that is not well understood by most people, especially materialists who deny it completely. Destiny is God's perfect knowledge of all events past or future. A majority of people question how God can already know events that have not yet been experienced and this leads them to fail to understand the authenticity of destiny. However, "events not yet experienced" are only so **for us**. God is not bound by time or space, for He Himself has created them. For this reason, **past, future, and present are all the same to God; for Him everything has already taken place and finished.**

In *The Universe* and Dr. Einstein, Lincoln Barnett explains how the Theory of General Relativity leads to this conclusion. According to Barnett, the universe can be "**encompassed in its entire majesty only by a cosmic intellect.**"<sup>424</sup> The will that Barnett calls "the cosmic intellect" is **the**

**wisdom and knowledge of God, Who prevails over the entire universe.**

Just as we can easily see a ruler's beginning, middle, and end, and all the units in between as a whole, God knows the time we are subject to as if it were a single moment right from its beginning to its end. People, however, experience incidents only when their time comes and they witness the destiny God has created for them.

It is also important to draw attention to the shallowness of the distorted understanding of destiny prevalent in our society. This distorted belief about fate is a superstition that God has determined a "destiny" for every man, but that people can sometimes change these destinies. For instance, people make superficial statements about a patient who returns from death's door, such as "he defeated his destiny." No one is able to change his destiny. The person, who returned from death's door, didn't die precisely because he was destined not to die at that time. It is, ironically, the destiny of those people who deceive themselves by saying "I defeated my destiny" that they should say so and maintain such a mindset. In the verse, **"...no living thing lives long or has its life cut short without that being in a Book. That is easy for God"** (Qur'an, 35: 11), it is stated that all things happen as a matter of destiny. Destiny is the eternal knowledge of God and for God, Who knows time like a single moment and Who prevails over the whole of time and space; everything is determined and finished in destiny.

We also understand from what He relates in the Qur'an that time is one for God: some incidents that appear to us to happen in the future are related in the Qur'an as if they had already taken place long before. For instance, the verses that describe the accounts that people must give to God in the hereafter are related as events which occurred long ago:

**And the trumpet is blown, and all who are in the heavens and all who are on the earth swoon away, save him whom God wills. Then it is blown a second time, and behold them standing waiting! And the earth shone with the light of her Lord, and the Book is set up, and the prophets and the witnesses are brought, and it is judged between them with truth, and they are not wronged... And those who disbelieve are driven into hell in troops... And those who feared their Lord are driven into Paradise in troops... (Qur'an, 39: 68-73)**

As may be seen, occurrences that are going to take place after our death (from our point of view) are related in the Qur'an as past events already experienced. God is not bound by the relative time frame in which we are confined. God has willed these things in timelessness: people have already performed them and all these events have been lived through and are ended. He states in the verse below that every event, big or small, is within the knowledge of God and recorded in a book:

**In whatever business you may be, and whatever portion you may be reciting from the Qur'an, and whatever deed you (mankind) may be doing, We are witnesses of these things when you are deeply engrossed in them. Nor is there hidden from your Lord so much as the weight of an atom on the earth or in heaven. And there is neither the least and nor the greatest of these things but is recorded in a glorious book. (Qur'an, 10: 61)**

With this secret out in the open, **the world becomes like heaven for a believer.** All distressful material worries, anxieties, and fears vanish. He grasps that the entire universe has a single sovereign, that He changes the entire physical world as He pleases and that all one has to do is to turn to Him. He then submits himself entirely to God **"to be devoted to His service."** (Qur'an, 3: 35)

To comprehend this secret is the greatest gain in the world.

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*Glory be to You!*

*We have no knowledge except what*

*You have taught us. You are*

*the All-Knowing, the All-Wise.*

*(Qur'an, 2: 32)*

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## NOTES

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- <sup>1</sup> H. S. Lipson, "A Physicist's View of Darwin's Theory", *Evolution Trends in Plants*, vol. 2, no. 1, 1988, p. 6.
- <sup>2</sup> Sidney Fox, Klaus Dose. *Molecular Evolution and The Origin of Life*. W.H. Freeman and Company, San Francisco, 1972, p. 4.
- <sup>3</sup> Gordon Rattray Taylor, *The Great Evolution Mystery*, Abacus, Sphere Books, London, 1984, pp. 36, 41-42.
- <sup>4</sup> B.E. Bishop, "Mendel's Opposition to Evolution and to Darwin," *Journal of Heredity*, 87, 1996, pp. 205-213; also please see. L.A. Callender, "Gregor Mendel: An Opponent of Descent with Modification," *History of Science*, 26, 1988, pp. 41-75.
- <sup>5</sup> Lee Spetner, *Not By Chance!*, The Judaica Press, New York, 1997, p. 20.
- <sup>6</sup> Michael Denton, *Evolution: A Theory in Crisis*, Burnett Books, London, 1985.
- <sup>7</sup> Charles Darwin, *The Origin of Species by Means of Natural Selection*, The Modern Library, New York, p. 127. (*emphasis added*)
- <sup>8</sup> V. C. Wynne-Edwards, "Self Regulating Systems in Populations of Animals, *Science*, vol. 147, 26 March 1965, pp. 1543-1548; V. C. Wynne-Edwards, *Evolution Through Group Selection*, London, 1986.
- <sup>9</sup> A. D. Bradshaw, "Evolutionary significance of phenotypic plasticity in plants," *Advances in Genetics*, vol. 13, pp. 115-155; cited in Lee Spetner, *Not By Chance!: Shattering the Modern Theory of Evolution*, The Judaica Press, Inc., New York, 1997, pp. 16-17.
- <sup>10</sup> Andy Coghlan "Suicide Squad", *New Scientist*, 10 July 1999.
- <sup>11</sup> Colin Patterson, "Cladistics", Interview by Brian Leek, interviewer Peter Franz, March 4, 1982, BBC. (*emphasis added*)
- <sup>12</sup> Phillip E. Johnson, *Darwin On Trial*, Intervarsity Press, Illinois, 1993, p. 27.
- <sup>13</sup> For more detailed information about Industrial Melanism, please see Phillip Johnson, *Darwin on Trial*, InterVarsity Press, 2<sup>nd</sup>. Ed., Washington D.C., p. 26.
- <sup>14</sup> Jonathan Wells, *Icons of Evolution: Science or Myth? Why Much of What We Teach About Evolution is Wrong*, Regnery Publishing, Washington, 2000, pp. 149-150.
- <sup>15</sup> Jonathan Wells, *Icons of Evolution: Science or Myth? Why Much of What We Teach About Evolution is Wrong*, Regnery Publishing, Washington, 2000, pp. 141-151.
- <sup>16</sup> Jerry Coyne, "Not Black and White", a review of Michael Majerus's *Melanism: Evolution in Action*, *Nature*, 396, 1988, pp. 35-36.
- <sup>17</sup> Stephen Jay Gould, "The Return of Hopeful Monster", *Natural History*, vol. 86, June-July 1977, p. 28.
- <sup>18</sup> Charles Darwin, *The Origin of Species: A Facsimile of the First Edition*, Harvard University Press, 1964, p. 189. (*emphasis added*)
- <sup>19</sup> B. G. Ranganathan, *Origins?*, Pennsylvania: The Banner Of Truth Trust, 1988. (*emphasis added*)
- <sup>20</sup> Warren Weaver et al., "Genetic Effects of Atomic Radiation", *Science*, vol. 123, June 29, 1956, p. 1159. (*emphasis added*)
- <sup>21</sup> Gordon Rattray Taylor, *The Great Evolution Mystery*, Abacus, Sphere Books, London, 1984, p. 48.
- <sup>22</sup> Michael Pitman, *Adam and Evolution*, River Publishing, London, 1984, p. 70. (*emphasis added*)
- <sup>23</sup> David A. Demick, "The Blind Gunman", *Impact*, no. 308, February 1999. (*emphasis added*)
- <sup>24</sup> Pierre-Paul Grassé, *Evolution of Living Organisms*, Academic Press, New York,

1977, p. 97, 98.

<sup>25</sup> Pierre-Paul Grassé, *Evolution of Living Organisms*, Academic Press, New York, 1977, p. 88. (*emphasis added*)

<sup>26</sup> Michael Denton, *Evolution: A Theory in Crisis*, Burnett Books Ltd., London, 1985, p. 149.

<sup>27</sup> Pierre-Paul Grassé, *Evolution of Living Organisms*, Academic Press, New York, 1977, p. 87. (*emphasis added*)

<sup>28</sup> Loren C. Eiseley, *The Immense Journey*, Vintage Books, 1958, p. 186.; cited in Norman Macbeth, *Darwin Retried: An Appeal to Reason*, Harvard Common Press, Boston, 1971, p. 30.

<sup>29</sup> Charles Darwin, *The Origin of Species: A Facsimile of the First Edition*, Harvard University Press, 1964, p. 184.

<sup>30</sup> Norman Macbeth, *Darwin Retried: An Appeal to Reason*, Harvard Common Press, Boston, 1971, pp. 32-33.

<sup>31</sup> Norman Macbeth, *Darwin Retried: An Appeal to Reason*, Harvard Common Press, Boston, 1971, p. 36.

<sup>32</sup> Jerry Bergman, Some Biological Problems With the Natural Selection Theory, *The Creation Research Society Quarterly*, vol. 29, no. 3, December 1992.

<sup>33</sup> Loren Eiseley, *The Immense Journey*, Vintage Books, 1958. p 227., cited in Norman Macbeth, *Darwin Retried: An Appeal to Reason*, Harvard Common Press, Boston, 1971, p. 33.

<sup>34</sup> Scott Gilbert, John Opitz, and Rudolf Raff, "Resynthesizing Evolutionary and Developmental Biology", *Developmental Biology*, 173, Article no. 0032, 1996, p. 361. (*emphasis added*)

<sup>35</sup> R. Lewin, "Evolutionary Theory Under Fire", *Science*, vol. 210, 21 November, 1980, p. 883.

<sup>36</sup> H. Lisle Gibbs and Peter R. Grant, "Oscillating selection on Darwin's finches," *Nature*, 327, 1987, pp. 513; For more detailed information, please see Jonathan Wells, *Icons of Evolution*, 2000, pp. 159-175.

<sup>37</sup> Robert L. Carroll, *Patterns and Processes of Vertebrate Evolution*, Cambridge University Press, 1997, p. 9

<sup>38</sup> Pierre Grassé, *Evolution of Living Organisms*, Academic Press, New York, 1977, p. 82.

<sup>39</sup> Charles Darwin, *The Origin of Species: A Facsimile of the First Edition*, Harvard University Press, 1964, p. 179.

<sup>40</sup> Charles Darwin, *The Origin of Species by Means of Natural Selection*, The Modern Library, New York, p. 124-125. (*emphasis added*)

<sup>41</sup> Robert L. Carroll, *Patterns and Processes of Vertebrate Evolution*, Cambridge University Press, 1997, p. 25.

<sup>42</sup> K. S. Thomson, *Morphogenesis and Evolution*, Oxford, Oxford University Press, 1988, p. 98.

<sup>43</sup> Francis Hitching, *The Neck of the Giraffe: Where Darwin Went Wrong*, Tichnor and Fields, New Haven, 1982, p. 40.

<sup>44</sup> S.J. Gould, "Evolution's Erratic Pace", *Natural History*, vol. 86, May 1977. (*emphasis added*)

<sup>45</sup> Stephen Jay Gould and Niles Eldredge, "Punctuated Equilibria: The Tempo and Mode of Evolution Reconsidered", *Paleobiology*, 3 (2), 1977, p. 115.

<sup>46</sup> Robert L. Carroll, *Patterns and Processes of Vertebrate Evolution*, Cambridge University Press, 1997, p. 146.

<sup>47</sup> S. J. Gould & N. Eldredge, *Paleobiology*, vol. 3, 1977, p. 147.

<sup>48</sup> Duane T. Gish, *Evolution: Fossils Still Say No*, CA, 1995, p. 41

- <sup>49</sup> David Day, *Vanished Species*, Gallery Books, New York, 1989.
- <sup>50</sup> T. Neville George, "Fossils in Evolutionary Perspective," *Science Progress*, vol. 48, January 1960, pp. 1, 3. (*emphasis added*)
- <sup>51</sup> N. Eldredge and I. Tattersall, *The Myths of Human Evolution*, Columbia University Press, 1982, p. 59. (*emphasis added*)
- <sup>52</sup> R. Wesson, *Beyond Natural Selection*, MIT Press, Cambridge, MA, 1991, p. 45.
- <sup>53</sup> *Science*, July 17, 1981, p. 289. (*emphasis added*)
- <sup>54</sup> N. Eldredge, and I. Tattersall, *The Myths of Human Evolution*, Columbia University Press, 1982, pp. 45-46. (*emphasis added*)
- <sup>55</sup> S. M. Stanley, *The New Evolutionary Timetable: Fossils, Genes, and the Origin of Species*, Basic Books Inc., N.Y., 1981, p. 71. (*emphasis added*)
- <sup>56</sup> Stephen C. Meyer, P. A. Nelson, and Paul Chien, *The Cambrian Explosion: Biology's Big Bang*, 2001, p. 2.
- <sup>57</sup> Richard Monastersky, "Mysteries of the Orient," *Discover*, April 1993, p. 40. (*emphasis added*)
- <sup>58</sup> Richard Monastersky, "Mysteries of the Orient," *Discover*, April 1993, p. 40.
- <sup>59</sup> Richard Dawkins, *The Blind Watchmaker*, W. W. Norton, London, 1986, p. 229. (*emphasis added*)
- <sup>60</sup> Phillip E. Johnson, "Darwinism's Rules of Reasoning," in *Darwinism: Science or Philosophy* by Buell Hearn, Foundation for Thought and Ethics, 1994, p. 12. (*emphasis added*)
- <sup>61</sup> R. Lewin, *Science*, vol. 241, 15 July 1988, p. 291. (*emphasis added*)
- <sup>62</sup> Gregory A. Wray, "The Grand Scheme of Life," Review of *The Crucible Creation: The Burgess Shale and the Rise of Animals* by Simon Conway Morris, *Trends in Genetics*, February 1999, vol. 15, no. 2.
- <sup>63</sup> Richard Fortey, "The Cambrian Explosion Exploded?," *Science*, vol. 293, no. 5529, 20 July 2001, pp. 438-439.
- <sup>64</sup> Richard Fortey, "The Cambrian Explosion Exploded?," *Science*, vol. 293, no. 5529, 20 July 2001, pp. 438-439.
- <sup>65</sup> Douglas J. Futuyma, *Science on Trial*, Pantheon Books, New York, 1983, p. 197.
- <sup>66</sup> Jeffrey S. Levinton, "The Big Bang of Animal Evolution," *Scientific American*, vol. 267, November 1992, p. 84.
- <sup>67</sup> "The New Animal Phylogeny: Reliability And Implications", *Proc. of Nat. Aca. of Sci.*, 25 April 2000, vol. 97, no. 9, pp. 4453-4456.
- <sup>68</sup> "The New Animal Phylogeny: Reliability And Implications", *Proc. of Nat. Aca. of Sci.*, 25 April 2000, vol. 97, no. 9, pp. 4453-4456.
- <sup>69</sup> David Raup, "Conflicts Between Darwin and Paleontology," *Bulletin*, Field Museum of Natural History, vol. 50, January 1979, p. 24.
- <sup>70</sup> Richard Fortey, "The Cambrian Explosion Exploded?," *Science*, vol. 293, no. 5529, 20 July 2001, pp. 438-439.
- <sup>71</sup> Charles Darwin, *The Origin of Species*, 1859, p. 313-314.
- <sup>72</sup> Charles Darwin, *The Origin of Species: A Facsimile of the First Edition*, Harvard University Press, 1964, p. 302.
- <sup>73</sup> Stefan Bengtson, *Nature*, vol. 345, 1990, p. 765. (*emphasis added*)
- <sup>74</sup> R. L. Gregory, *Eye and Brain: The Physiology of Seeing*, Oxford University Press, 1995, p. 31.
- <sup>75</sup> Douglas Palmer, *The Atlas of the Prehistoric World*, Discovery Channel, Marshall Publishing, London, 1999, p. 66.

- <sup>76</sup> Mustafa Kuru, *Omurgalı Hayvanlar* (Vertebrates), Gazi University Publications, 5<sup>th</sup> ed., Ankara, 1996, p. 21. (*emphasis added*)
- <sup>77</sup> Mustafa Kuru, *Omurgalı Hayvanlar* (Vertebrates), Gazi University Publications, 5<sup>th</sup> ed., Ankara, 1996, p. 27.
- <sup>78</sup> Douglas Palmer, *The Atlas of the Prehistoric World*, Discovery Channel, Marshall Publishing, London, 1999, p. 64.
- <sup>79</sup> Robert L. Carroll, *Patterns and Processes of Vertebrate Evolution*, Cambridge University Press, 1997, pp. 296.
- <sup>80</sup> Gerald T. Todd, "Evolution of the Lung and the Origin of Bony Fishes: A Casual Relationship," *American Zoologist*, vol. 26, no. 4, 1980, p. 757.
- <sup>81</sup> Ali Demirsoy, *Kalitim ve Evrim* (Inheritance and Evolution), Meteksan Publishing Co., Ankara, 1984, pp. 495-496.
- <sup>82</sup> Henry Gee, *In Search Of Deep Time: Going Beyond The Fossil Record To A Revolutionary Understanding of the History Of Life*, The Free Press, A Division of Simon & Schuster Inc., 1999, p. 7.
- <sup>83</sup> Robert L. Carroll, *Patterns and Processes of Vertebrate Evolution*, Cambridge University Press, 1997, p. 230.
- <sup>84</sup> Robert L. Carroll, *Patterns and Processes of Vertebrate Evolution*, Cambridge University Press, 1997, p. 301.
- <sup>85</sup> This time frame is also given by Carroll, *Patterns and Processes of Vertebrate Evolution*, Cambridge University Press, 1997, p. 304.
- <sup>86</sup> Henry Gee, *In Search Of Deep Time: Going Beyond The Fossil Record To A Revolutionary Understanding of the History Of Life*, The Free Press, A Division of Simon & Schuster, Inc., 1999, p. 54.
- <sup>87</sup> Robert L. Carroll, *Patterns and Processes of Vertebrate Evolution*, Cambridge University Press, 1997, pp. 292-93.
- <sup>88</sup> Jean-Jacques Hublin, *The Hamlyn Encyclopædia of Prehistoric Animals*, The Hamlyn Publishing Group Ltd., New York, 1984, p. 120.
- <sup>89</sup> [www.ksu.edu/fishecology/relict.htm](http://www.ksu.edu/fishecology/relict.htm)
- <sup>90</sup> <http://www.cnn.com/TECH/science/9809/23/living.fossil/index.html>
- <sup>91</sup> P. L. Forey, *Nature*, vol. 336, 1988, p. 727.
- <sup>92</sup> Michael Denton, *Evolution: A Theory In Crisis*, Adler and Adler, 1986, pp. 218-219.
- <sup>93</sup> Robert L. Carroll, *Vertebrate Paleontology and Evolution*, W. H. Freeman and Co., New York, 1988, p. 198.
- <sup>94</sup> Robert L. Carroll, *Patterns and Processes of Vertebrate Evolution*, Cambridge University Press, 1997, pp. 296-97.
- <sup>95</sup> Stephen Jay Gould, "Eight (or Fewer) Little Piggies," *Natural History*, vol. 100, no. 1, January 1991, p. 25. (*emphasis added*)
- <sup>96</sup> Duane Gish, *Evolution: The Fossils Still Say No!*, Institute For Creation Research, California, 1995, p. 97.
- <sup>97</sup> Robert Carroll, *Vertebrate Paleontology and Evolution*, p. 235.
- <sup>98</sup> Encyclopaedia Britannica Online, "Turtle – Origin and Evolution."
- <sup>99</sup> Robert L. Carroll, *Patterns and Processes of Vertebrate Evolution*, Cambridge University Press, 1997, pp. 296-97. (*emphasis added*)
- <sup>100</sup> Duane T. Gish, *Evolution: The Fossils Still Say No*, ICR, San Diego, 1998, p. 103.
- <sup>101</sup> Robert L. Carroll, *Vertebrate Paleontology and Evolution*. p. 336. (*emphasis added*)
- <sup>102</sup> Robert L. Carroll, *Patterns and Processes of Vertebrate Evolution*, Cambridge University Press, 1997, pp. 296-97.
- <sup>103</sup> E. H. Colbert, M. Morales, *Evolution of the Vertebrates*, John Wiley and Sons, 1991,

- p. 193. (*emphasis added*)
- <sup>104</sup> A. S Romer, *Vertebrate Paleontology*, 3<sup>rd</sup> ed., Chicago University Press, Chicago, 1966, p. 120. (*emphasis added*)
- <sup>105</sup> Robert L. Carroll, *Patterns and Processes of Vertebrate Evolution*, Cambridge University Press, 1997, p. 296-97.
- <sup>106</sup> John Ostrom, "Bird Flight: How Did It Begin?," *American Scientist*, January-February 1979, vol. 67, p. 47.
- <sup>107</sup> Robert L. Carroll, *Patterns and Processes of Vertebrate Evolution*, Cambridge University Press, 1997, p. 314.
- <sup>108</sup> Pat Shipman, "Birds Do It... Did Dinosaurs?," *New Scientist*, 1 February 1997, p. 28.
- <sup>109</sup> Pat Shipman, "Birds Do It... Did Dinosaurs?," *New Scientist*, 1 February 1997, p. 28.
- <sup>110</sup> Duane T. Gish, *Dinosaurs by Design*, Master Books, AR, 1996, pp. 65-66.
- <sup>111</sup> Michael Denton, *A Theory in Crisis*, Adler & Adler, 1986, pp. 210-211.
- <sup>112</sup> Michael Denton, *A Theory in Crisis*, Adler & Adler, 1986, pp. 211-212. (*emphasis added*)
- <sup>113</sup> J. A. Ruben, T. D. Jones, N. R. Geist, and W. J. Hillenius, "Lung Structure And Ventilation in Theropod Dinosaurs and Early Birds," *Science*, vol. 278, p. 1267.
- <sup>114</sup> Michael J. Denton, *Nature's Destiny*, Free Press, New York, 1998, p. 361.
- <sup>115</sup> Michael J. Denton, *Nature's Destiny*, Free Press, New York, 1998, pp. 361-62.
- <sup>116</sup> Barbara J. Stahl, *Vertebrate History: Problems in Evolution*, Dover, 1985, pp. 349-350. (*emphasis added*)
- <sup>117</sup> A. H. Brush, "On the Origin of Feathers," *Journal of Evolutionary Biology*, vol. 9, 1996, p.132.
- <sup>118</sup> A. H. Brush, "On the Origin of Feathers," *Journal of Evolutionary Biology*, vol. 9, 1996, p.131.
- <sup>119</sup> A. H. Brush, "On the Origin of Feathers," *Journal of Evolutionary Biology*, vol. 9, 1996, p.133.
- <sup>120</sup> A. H. Brush, "On the Origin of Feathers," *Journal of Evolutionary Biology*, vol. 9, 1996, p.131.
- <sup>121</sup> Alan Feduccia, "On Why Dinosaurs Lacked Feathers," *The Beginning of Birds*, Eichstatt, West Germany: Jura Museum, 1985, p. 76. (*emphasis added*)
- <sup>122</sup> Ernst Mayr, *Systematics and the Origin of Species*, Dove, New York, 1964, p. 296.
- <sup>123</sup> Norman Macbeth, *Darwin Retried: An Appeal to Reason*, Harvard Common Press, 1971, p. 131.
- <sup>124</sup> *Nature*, vol. 382, August, 1, 1996, p. 401.
- <sup>125</sup> Carl O. Dunbar, *Historical Geology*, John Wiley and Sons, New York, 1961, p. 310.
- <sup>126</sup> Robert L. Carroll, *Patterns and Processes of Vertebrate Evolution*, Cambridge University Press, 1997, p. 280-81.
- <sup>127</sup> L. D. Martin, J. D. Stewart, K. N. Whetstone, *The Auk*, vol. 97, 1980, p. 86.
- <sup>128</sup> L. D. Martin, J. D. Stewart, K. N. Whetstone, *The Auk*, vol. 97, 1980, p. 86; L. D. Martin, "Origins of the Higher Groups of Tetrapods", Ithaca, Comstock Publishing Association, New York, 1991, pp. 485-540.
- <sup>129</sup> S. Tarsitano, M. K. Hecht, *Zoological Journal of the Linnaean Society*, vol. 69, 1980, p. 149; A. D. Walker, *Geological Magazine*, vol. 117, 1980, p. 595.
- <sup>130</sup> A.D. Walker, as described in Peter Dodson, "International Archaeopteryx Conference," *Journal of Vertebrate Paleontology* 5(2):177, June 1985.
- <sup>131</sup> Richard Hinchliffe, "The Forward March of the Bird-Dinosaurs Halted?,"

- Science*, vol. 278, no. 5338, 24 October 1997, pp. 596-597.
- 132 Jonathan Wells, *Icons of Evolution*, Regnery Publishing, 2000, p. 117
- 133 Richard L. Deem, "Demise of the 'Birds are Dinosaurs' Theory," <http://www.yfiles.com/dinobird2.html>.
- 134 Pat Shipman, "Birds do it... Did Dinosaurs?," *New Scientist*, 1 February, 1997, p. 31.
- 135 "Old Bird," *Discover*, March 21, 1997.
- 136 "Old Bird," *Discover*, March 21, 1997.
- 137 Pat Shipman, "Birds Do It... Did Dinosaurs?," p. 28.
- 138 Ann Gibbons, "Plucking the Feathered Dinosaur," *Science*, vol. 278, no. 5341, 14 November 1997, pp. 1229 - 1230
- 139 *National Geographic*, Vol. 196, No. 5, November 1999, "Feathers for *T. Rex*?"
- 140 Tim Friend, "Dinosaur-bird link smashed in fossil flap," *USA Today*, 25 January 2000
- 141 "Open Letter: Smithsonian decries National Geographic's "editorial propagandizing" of dinosaur-to-bird "evolution," <http://www.trueorigin.org/birdevoletter.asp>
- 142 M. Kusnitz, *Science World*, 4 February, 1983, p. 19.
- 143 *San Diego Union*, New York Times Press Service, 29 May, 1983; W. A. Shear, *Science*, vol. 224, 1984, p. 494. (*emphasis added*)
- 144 R. J. Wootton, C. P. Ellington, "Biomechanics & the Origin of Insect Flight," *Biomechanics in Evolution*, ed. J. M. V. Rayner & R. J. Wootton, Cambridge University Press, Cambridge, 1991, p. 99.
- 145 Robin J. Wootton, "The Mechanical Design of Insect Wings," *Scientific American*, vol. 263, November 1990, p. 120. (*emphasis added*)
- 146 Pierre-P Grassé, *Evolution of Living Organisms*, Academic Press, New York, 1977, p. 30. (*emphasis added*)
- 147 George Gamow, *Martynas Ycas, Mr. Tompkins Inside Himself*, The Viking Press, New York, 1967, p. 149.
- 148 Roger Lewin, "Bones of Mammals, Ancestors Fleshed Out," *Science*, vol. 212, June 26, 1981, p. 1492. (*emphasis added*)
- 149 George Gaylord Simpson, *Life Before Man*, Time-Life Books, New York, 1972, p. 42. (*emphasis added*)
- 150 R. Eric Lombard, "Review of Evolutionary Principles of the Mammalian Middle Ear, Gerald Fleischer," *Evolution*, vol. 33, December 1979, p. 1230.
- 151 George G., Simpson, *Tempo and Mode in Evolution*, Columbia University Press, New York, 1944, pp. 105, 107.
- 152 Boyce Rensberger, *Houston Chronicle*, November 5, 1980, p. 15. (*emphasis added*)
- 153 Colin Patterson, *Harper's*, February 1984, p. 60. (*emphasis added*)
- 154 Francis Hitching, *The Neck of the Giraffe: Where Darwin Went Wrong*, New American Library, New York, 1982, pp. 16-17, 19.
- 155 Francis Hitching, *The Neck of the Giraffe: Where Darwin Went Wrong*, New American Library, New York, 1982, pp. 16-17, 19.
- 156 Gordon Rattray Taylor, *The Great Evolution Mystery*, Abacus, Sphere Books, London, 1984, p. 230. (*emphasis added*)
- 157 John E. Hill, James D Smith, *Bats: A Natural History*, British Museum of Natural History, London, 1984, p. 33. (*emphasis added*)
- 158 L. R. Godfrey, "Creationism and Gaps in the Fossil Record," *Scientists Confront Creationism*, W. W. Norton and Company, 1983, p. 199.
- 159 Jeff Hecht, "Branching Out," *New*

*Scientist*, 10 October 1998, vol. 160, no. 2155, p. 14.

<sup>160</sup> Douglas H. Chadwick, "Evolution of Whales," *National Geographic*, November 2001, p. 68.

<sup>161</sup> Robert L. Carroll, *Patterns and Process of Vertebrate Evolution*, Cambridge University Press, 1998, p.329.

<sup>162</sup> Ashby L. Camp, "The Overselling of Whale Evolution," *Creation Matters*, a newsletter published by the Creation Research Society, May/June 1998.

<sup>163</sup> Douglas H. Chadwick, "Evolution of Whales," *National Geographic*, November 2001, p. 73.

<sup>164</sup> Robert L. Carroll, *Patterns and Processes of Vertebrate Evolution*, Cambridge University Press, 1998, p. 329.

<sup>165</sup> G. A. Mchedlidze, *General Features of the Paleobiological Evolution of Cetacea*, trans. from Russian (Rotterdam: A. A. Balkema, 1986), p. 91.

<sup>166</sup> Ashby L. Camp, "The Overselling of Whale Evolution," *Creation Matters*, a newsletter published by the Creation Research Society, May/June 1998.

<sup>167</sup> Douglas H. Chadwick, "Evolution of Whales," *National Geographic*, November 2001, p. 69.

<sup>168</sup> Henry Gee, *In Search Of Deep Time: Beyond The Fossil Record To A New History Of Life*, The Free Press, A Division of Simon & Schuster Inc., 1999, p. 103.

<sup>169</sup> B.J. Stahl, *Vertebrate History: Problems in Evolution*, Dover Publications Inc., 1985, p. 489.

<sup>170</sup> Michel C. Milinkovitch, "Molecular phylogeny of cetaceans prompts revision of morphological transformations," *Trends in Ecology and Evolution*, 10 August 1995, pp. 328-334.

<sup>171</sup> Douglas J. Futuyma, *Science on Trial*, Pantheon Books, New York, 1983, p. 197.

<sup>172</sup> Stephen Jay Gould, "Evolution's Erratic Pace," *Natural History*, vol. 86, May 1977, p. 14.

<sup>173</sup> Stephen M. Stanley, *Macroevolution: Pattern and Process*, W. H. Freeman and Co., San Francisco, 1979, pp. 35, 159.

<sup>174</sup> S. J. Gould, "Return of the Hopeful Monster," *The Panda's Thumb*, W. W. Norton Co., New York, 1980, pp. 186-193.

<sup>175</sup> R. A. Fisher, *The Genetical Theory of Natural Selection*, Oxford University Press, Oxford, 1930.

<sup>176</sup> Ernst Mayr, *Populations, Species, and Evolution*, Belknap Press, Cambridge, 1970, p. 235.

<sup>177</sup> Lane P. Lester, Raymond G. Bohlin, *The Natural Limits to Biological Change*, Probe Books, Dallas, 1989, pp. 141-142. (*emphasis added*)

<sup>178</sup> M. E. Soulé and L. S. Mills, "Enhanced: No need to isolate genetics," *Science*, 1998, vol. 282, p. 1658.

<sup>179</sup> R. L. Westemeier, J. D. Brawn, J. D. Brawn, S. A. Simpson, T. L. Esker, R. W. Jansen, J. W. Walk, E. L. Kershner, J. L. Bouzat, and K. N. Paige, "Tracking the long-term decline and recovery of an isolated population", *Science*, 1998, vol. 282, p. 1695.

<sup>180</sup> Phillip Johnson, *Objections Sustained*, Intervarsity Press, Illinois, 1998, pp. 77-85.

<sup>181</sup> Richard E. Leakey, *The Making of Mankind*, Sphere Books Limited, Barcelona, 1982, p. 43.

<sup>182</sup> William R. Fix, *The Bone Peddlers*, Macmillan Publishing Company, New York, 1984, pp. 150-153.

<sup>183</sup> "Could science be brought to an end by scientists' belief that they have final

- answers or by society's reluctance to pay the bills?" *Scientific American*, December 1992, p. 20.
- <sup>184</sup> David Pilbeam, "Rearranging Our Family Tree," *Human Nature*, June 1978, p. 40.
- <sup>185</sup> C. C. Swisher III, W. J. Rink, S. C. Antón, H. P. Schwarcz, G. H. Curtis, A. Suprijo, Widiastromo, "Latest Homo erectus of Java: Potential Contemporaneity with Homo sapiens in Southeast Asia," *Science*, Volume 274, Number 5294, Issue of 13 Dec 1996, pp. 1870-1874; also see, Jeffrey Kluger, "Not So Extinct After All: The Primitive Homo Erectus May Have Survived Long Enough To Coexist With Modern Humans," *Time*, December 23, 1996
- <sup>186</sup> Solly Zuckerman, *Beyond The Ivory Tower*, Toplinger Publications, New York, 1970, pp. 75-94.
- <sup>187</sup> Charles E. Oxnard, "The Place of Australopithecines in Human Evolution: Grounds for Doubt," *Nature*, vol. 258, 4 December 1975, p. 389.
- <sup>188</sup> Isabelle Bourdial, "Adieu Lucy," *Science et Vie*, May 1999, no. 980, pp. 52-62. (*emphasis added*)
- <sup>189</sup> Holly Smith, *American Journal of Physical Anthropology*, vol. 94, 1994, pp. 307-325. (*emphasis added*)
- <sup>190</sup> Fred Spoor, Bernard Wood & Frans Zonneveld, "Implications of Early Hominid Labyrinthine Morphology for Evolution of Human Bipedal Locomotion," *Nature*, vol 369, 23 June 1994, p. 645
- <sup>191</sup> Fred Spoor, Bernard Wood & Frans Zonneveld, "Implications of Early Hominid Labyrinthine Morphology for Evolution of Human Bipedal Locomotion," *Nature*, vol 369, 23 June 1994, p. 648
- <sup>192</sup> Tim Bromage, "Faces From the Past," *New Scientist*, vol. 133, issue 1803, 11 January 1992, p. 41. (*emphasis added*)
- <sup>193</sup> J. E. Cronin, N. T. Boaz, C. B. Stringer, Y. Rak, "Tempo and Mode in Hominid Evolution," *Nature*, vol. 292, 1981, pp. 117.
- <sup>194</sup> C. L. Brace, H. Nelson, N. Korn, M. L. Brace, *Atlas of Human Evolution*, 2. b., Rinehart and Wilson, New York, 1979.
- <sup>195</sup> Alan Walker and Richard E.F. Leakey, "The Hominids of East Turkana", *Scientific American*, vol. 239 (2), August 1978, p. 54.
- <sup>196</sup> Bernard Wood, Mark Collard, "The Human Genus," *Science*, vol. 284, No 5411, 2 April 1999, pp. 65-71.
- <sup>197</sup> Marvin Lubenow, *Bones of Contention: a creationist assessment of the human fossils*, Baker Books, 1992, p. 83.
- <sup>198</sup> Boyce Rensberger, *Washington Post*, 19 October 1984, p. A11.
- <sup>199</sup> Richard Leakey, *The Making of Mankind*, Sphere Books, London, 1981, p. 116.
- <sup>200</sup> Marvin Lubenow, *Bones of Contention: a creationist assessment of the human fossils*, Baker Books, 1992. p. 136.
- <sup>201</sup> Pat Shipman, "Doubting Dmanisi," *American Scientist*, November- December 2000, p. 491
- <sup>202</sup> Erik Trinkaus, "Hard Times Among the Neanderthals," *Natural History*, vol. 87, December 1978, p. 10; R. L. Holloway, "The Neanderthal Brain: What Was Primitive," *American Journal of Physical Anthropology Supplement*, vol. 12, 1991, p. 94. (*emphasis added*)
- <sup>203</sup> "Neandertals Lived Harmoniously," *The AAAS Science News Service*, April 3, 1997.
- <sup>204</sup> Ralph Solecki, Shanidar, *The First Flower People*, Knopf, New York, 1971, p. 196; Paul G. Bahn and Jean Vertut, *Images in the Ice*, Windward, Leichester, 1988, p. 72.

- <sup>205</sup> D. Johanson, B. Edgar, *From Lucy to Language*, p. 99.
- <sup>206</sup> S. L. Kuhn, "Subsistence, Technology, and Adaptive Variation in Middle Paleolithic Italy," *American Anthropologist*, vol. 94, no. 2, March 1992, pp. 309-310.
- <sup>207</sup> Roger Lewin, *The Origin of Modern Humans*, Scientific American Library, New York, 1993, p. 131.
- <sup>208</sup> R.E.F. Leakey, A. Walker, "On the Status of *Australopithecus afarensis*", *Science*, vol. 207, issue 4435, 7 March 1980, p. 1103.
- <sup>209</sup> A. J. Kelso, *Physical Anthropology*, 1<sup>st</sup> ed., J. B. Lipincott Co., New York, 1970, p. 221; M. D. Leakey, *Olduvai Gorge*, vol. 3, Cambridge University Press, Cambridge, 1971, p. 272.
- <sup>210</sup> S. J. Gould, *Natural History*, vol. 85, 1976, p. 30. (*emphasis added*)
- <sup>211</sup> Jeffrey Kluger, "Not So Extinct After All: The Primitive Homo Erectus May Have Survived Long Enough To Coexist With Modern Humans," *Time*, 23 December 1996.
- <sup>212</sup> John Noble Wilford, "3 Human Species Coexisted Eons Ago, New Data Suggest," *The New York Times*, 13 December 1996.
- <sup>213</sup> John Whitfield, "Oldest member of human family found," *Nature*, 11 July 2002.
- <sup>214</sup> D.L. Parsell, "Skull Fossil From Chad Forces Rethinking of Human Origins," *National Geographic News*, July 10, 2002.
- <sup>215</sup> John Whitfield, "Oldest member of human family found," *Nature*, 11 July 2002.
- <sup>216</sup> The Guardian, 11 July 2002
- <sup>217</sup> L. S. B. Leakey, *The Origin of Homo Sapiens*, ed. F. Borde, UNESCO, Paris, 1972, pp. 25-29; L. S. B. Leakey, *By the Evidence*, Harcourt Brace Jovanovich, New York, 1974.
- <sup>218</sup> Robert Kunzig, "The Face of An Ancestral Child", *Discover*, December 1997, pp. 97, 100. (*emphasis added*)
- <sup>219</sup> A. J. Kelso, *Physical Anthropology*, 1.b., 1970, ss. 221; M.D. Leakey, *Olduvai Gorge*, volume 3, Cambridge: Cambridge University Press, 1971, s. 272
- <sup>220</sup> Donald C. Johanson & M. A. Edey, *Lucy, The Beginnings of Humankind*, Simon & Schuster, New York, 1981, p. 250. (*emphasis added*)
- <sup>221</sup> "The Leakey Footprints: An Uncertain Path," *Science News*, vol. 115, 1979, p. 196.
- <sup>222</sup> Ian Anderson, "Who made the Laetoli footprints?" *New Scientist*, vol. 98, 12 May 1983, p. 373. (*emphasis added*)
- <sup>223</sup> Russell H. Tuttle, "The Pitted Pattern of Laetoli Feet," *Natural History*, vol. 99, March 1990, p. 64. (*emphasis added*)
- <sup>224</sup> Ruth Henke, "Aufrecht aus den Bäumen," *Focus*, vol. 39, 1996, p. 178.
- <sup>225</sup> Elaine Morgan, *The Scars of Evolution*, Oxford University Press, New York, 1994, p. 5.
- <sup>226</sup> Solly Zuckerman, *Beyond The Ivory Tower*, Toplinger Publications, New York, 1970, p. 19. (*emphasis added*)
- <sup>227</sup> Robert Locke, "Family Fights," *Discovering Archaeology*, July/August 1999, p. 36-39.
- <sup>228</sup> Robert Locke, "Family Fights," *Discovering Archaeology*, July/August 1999, p. 36-39.
- <sup>229</sup> Henry Gee, *In Search of Time: Beyond the Fossil Record to a New History of Life*, New York, The Free Press, 1999, p. 126-127.
- <sup>230</sup> David R. Pilbeam, "Rearranging Our Family Tree," *Human Nature*, June 1978, p. 45. (*emphasis added*)
- <sup>231</sup> Earnest A. Hooton, *Up From The Ape*,

- McMillan, New York, 1931, p. 332. (*emphasis added*)
- 232 Malcolm Muggeridge, *The End of Christendom*, Grand Rapids, Eerdmans, 1980, p. 59.
- 233 Stephen Jay Gould, "Smith Woodward's Folly," *New Scientist*, 5 April 1979, p. 44.
- 234 Stephen Jay Gould, "Smith Woodward's Folly," *New Scientist*, 5 April 1979, p. 43. (*emphasis added*)
- 235 William K. Gregory, "Hesperopithecus Apparently Not An Ape Nor A Man," *Science*, vol. 66, issue 1720, 16 December 1927, p. 579.
- 236 Søren Løvtrup, *Darwinism: The Refutation of A Myth*, Croom Helm, New York, 1987, p. 422.
- 237 Michael Denton, *Evolution: A Theory in Crisis*, Burnett Books, London, 1985, pp. 328, 342.
- 238 Charles Darwin, *Life and Letter of Charles Darwin*, vol. II, From Charles Darwin to J. Do Hooker, March 29, 1863
- 239 W. R. Bird, *The Origin of Species Revisited*, Thomas Nelson Co., Nashville, 1991, pp. 298-99.
- 240 "Hoyle on Evolution," *Nature*, vol. 294, November 12, 1981, p. 105.
- 241 H. Blum, *Time's Arrow and Evolution*, 158 (3d ed. 1968), cited in W. R. Bird, *The Origin of Species Revisited*, Thomas Nelson Co., Nashville, 1991, p. 304. (*emphasis added*)
- 242 W. Stokes, *Essentials of Earth History*, 186 (4<sup>th</sup> ed. 1942), cited in W. R. Bird, *The Origin of Species Revisited*, Thomas Nelson Co., Nashville, 1991, p. 305.
- 243 J. D. Thomas, *Evolution and Faith*, ACU Press, Abilene, TX, 1988, pp. 81-82. (*emphasis added*)
- 244 Robert Shapiro, *Origins: A Skeptic's Guide to the Creation of Life on Earth*, Summit Books, New York, 1986, p. 127.
- 245 Fred Hoyle, Chandra Wickramasinghe, *Evolution from Space*, Simon & Schuster, New York, 1984, p. 148. (*emphasis added*)
- 246 Fred Hoyle, Chandra Wickramasinghe, *Evolution from Space*, Simon & Schuster, New York, 1984, p. 130. (*emphasis added*)
- 247 Simpson, Sarah, "Life's First Scalding Steps," *Science News*, Jan. 9, 1999, 155(2):25.
- 248 *Fabbri Britannica Bilim Ansiklopedisi* (Fabbri Britannica Science Encyclopaedia), vol. 2, no. 22, p. 519.
- 249 Dawkins, Richard, *Climbing Mount Improbable*, W.W. Norton, New York, 1996, p. 283.
- 250 Alexander I. Oparin, *Origin of Life*, Dover Publications, New York, 1936, 1953 (reprint), p. 196.
- 251 Klaus Dose, "The Origin of Life: More Questions Than Answers," *Interdisciplinary Science Reviews*, vol. 13, no. 4, 1988, p. 348. (*emphasis added*)
- 252 Horgan, John, *The End of Science*, MA Addison-Wesley, 1996, p. 138. (*emphasis added*)
- 253 Jeffrey Bada, *Earth*, "Life's Crucible," February 1998, p. 40. (*emphasis added*)
- 254 Richard B. Bliss, Gary E. Parker, Duane T. Gish, *Origin of Life*, C.L.P. Publications, 3<sup>rd</sup> ed., California, 1990, pp. 14-15.
- 255 Kevin Mc Kean, *Bilim ve Teknik* (Science and Technology), no. 189, p. 7.
- 256 J. P. Ferris, C. T. Chen, "Photochemistry of Methane, Nitrogen, and Water Mixture As a Model for the Atmosphere of the Primitive Earth," *Journal of American Chemical Society*, vol. 97:11, 1975, p. 2964.
- 257 "New Evidence on Evolution of Early Atmosphere and Life," *Bulletin of the*

- American Meteorological Society*, vol. 63, November 1982, pp. 1328-1330.
- 258 Richard B. Bliss & Gary E. Parker, Duane T. Gish, *Origin of Life*, C.L.P. Publications, 3<sup>rd</sup> ed., California, 1990, p. 16.
- 259 "Life's Crucible," *Earth*, February 1998, p. 34. (*emphasis added*)
- 260 "The Rise of Life on Earth," *National Geographic*, March 1998, p. 68. (*emphasis added*)
- 261 W. R. Bird, *The Origin of Species Revisited*, Thomas Nelson Co., Nashville, 1991, p. 325. (*emphasis added*)
- 262 Richard Dickerson, "Chemical Evolution," *Scientific American*, vol. 239:3, 1978, p. 75. Chemist Richard Dickerson explains the reason for this in this way: "If polymeric chains of proteins and nucleic acids are to be forged out of their precursor monomers, a molecule of water must be removed at each link in the chain. It is therefore hard to see how polymerization could have proceeded in the aqueous environment of the primitive ocean, since the presence of water favors depolymerization rather than polymerization."
- 263 S. W. Fox, K. Harada, G. Kramptiz, G. Mueller, "Chemical Origin of Cells," *Chemical Engineering News*, June 22, 1970, p. 80.
- 264 Frank B. Salisbury, "Doubts about the Modern Synthetic Theory of Evolution," *American Biology Teacher*, September 1971, p. 336.
- 265 Paul Auger, *De La Physique Theorique a la Biologie*, 1970, p. 118.
- 266 Francis Crick, *Life Itself: It's Origin and Nature*, New York, Simon & Schuster, 1981, p. 88. (*emphasis added*)
- 267 Ali Demirsoy, *Kalitim ve Evrim* (Inheritance and Evolution), Meteksan Publishing Co., Ankara, 1984, p. 39.
- 268 John Horgan, "In the Beginning," *Scientific American*, vol. 264, February 1991, p. 119. (*emphasis added*)
- 269 Homer Jacobson, "Information, Reproduction and the Origin of Life," *American Scientist*, January 1955, p. 121.
- 270 Douglas R. Hofstadter, *Gödel, Escher, Bach: An Eternal Golden Braid*, Vintage Books, New York, 1980, p. 548. (*emphasis added*)
- 271 Leslie E. Orgel, "The Origin of Life on Earth," *Scientific American*, vol. 271, October 1994, p. 78. (*emphasis added*)
- 272 Cairns-Smith, Alexander G., "The First Organisms," *Scientific American*, 252: 90, June 1985. (*emphasis added*)
- 273 Michael Denton, *Evolution: A Theory in Crisis*, London: Burnett Books, 1985, p. 351.
- 274 John Horgan, "In the Beginning," *Scientific American*, vol. 264, February 1991, p. 119.
- 275 G. F. Joyce, L. E. Orgel, "Prospects for Understanding the Origin of the RNA World," *In the RNA World*, Cold Spring Harbor Laboratory Press, New York, 1993, p. 13.
- 276 Jacques Monod, *Chance and Necessity*, New York, 1971, p. 143. (*emphasis added*)
- 277 Dover, Gabby L., Looping the Evolutionary loop, review of the origin of life from the birth of life to the origin of language, *Nature*, 1999, vol. 399, p. 218. (*emphasis added*)
- 278 Leslie E. Orgel, "The Origin of Life on the Earth," *Scientific American*, October 1994, vol. 271, p. 78.
- 279 Horgan, John, *The End of Science*, MA Addison-Wesley, 1996, p. 139.

- 280 Pierre-P Grassé, *Evolution of Living Organisms*, Academic Press, New York, 1977, p. 103. (*emphasis added*)
- 281 Chandra Wickramasinghe, Interview in London Daily Express, August 14, 1981.
- 282 Frank Salisbury, "Doubts About the Modern Synthetic Theory of Evolution," *American Biology Teacher*, September 1971, p. 338. (*emphasis added*)
- 283 Dean H. Kenyon, Percival Davis, *Of Pandas and People: The Central Question of Biological Origins*, Houghton Publishing, Dallas, 1993, p. 33.
- 284 Dean H. Kenyon, Percival Davis, *Of Pandas and People: The Central Question of Biological Origins*, Houghton Publishing, Dallas, 1993, p. 117.
- 285 Michael Denton, *Evolution: A Theory in Crisis*, Burnett Books, London, 1985, p. 145.
- 286 Gavin De Beer, *Homology: An Unsolved Problem*, Oxford University Press, London, 1971, p. 16.
- 287 Pere Alberch, "Problems with the Interpretation of Developmental Sequences," *Systematic Zoology*, 1985, vol. 34 (1), pp. 46-58.
- 288 Raff, Rudolf A., *The Shape of Life: Genes, Development, and the Evolution of Animal Form*, The University of Chicago Press, Chicago, 1996.
- 289 Coates M., "New paleontological contributions to limb ontogeny and phylogeny," In: J. R. Hinchcliffe (ed.), *Developmental Patterning of the Vertebrate Limb*, Plenum Press, New York, 1991, 325-337; Coates M. I., The Devonian tetrapod *Acanthostega gunnari* Jarvik: postcranial anatomy, basal tetrapod interrelationships and patterns of skeletal evolution, transactions of the Royal Society of Edinburgh, 1996, vol. 87, pp. 363-421.
- 290 Michael Denton, *Evolution: A Theory in Crisis*, Adler & Adler, Bethesda, MA, 1985, pp. 151, 154. (*emphasis added*)
- 291 William Fix, *The Bone Peddlers: Selling Evolution*, Macmillan Publishing Co., New York, 1984, p. 189. (*emphasis added*)
- 292 Karen Hopkin, "The Greatest Apes," *New Scientist*, vol. 62, issue 2186, 15 May 1999, p. 27.
- 293 Theodosius Dobzhansky, *Genetics of the Evolutionary Process*, Columbia University Press, New York & London, 1970, pp. 17-18.
- 294 Pierre Paul Grassé, *Evolution of Living Organisms*, Academic Press, New York, 1977, p. 194.
- 295 Mike Benton, "Is a Dog More Like Lizard or a Chicken?," *New Scientist*, vol. 103, August 16, 1984, p. 19. (*emphasis added*)
- 296 Paul Erbrich, "On the Probability of the Emergence of a Protein with a Particular Function," *Acta Biotheoretica*, vol. 34, 1985, p. 53.
- 297 Christian Schwabe, "On the Validity of Molecular Evolution," *Trends in Biochemical Sciences*, vol. 11, July 1986, p. 280. (*emphasis added*)
- 298 Christian Schwabe, "Theoretical Limitations of Molecular Phylogenetics and the Evolution of Relaxins," *Comparative Biochemical Physiology*, vol. 107B, 1974, pp.171-172. (*emphasis added*)
- 299 Christian Schwabe and Gregory W. Warr, "A Polyphyletic View of Evolution," *Perspectives in Biology and Medicine*, vol. 27, Spring 1984, p. 473. (*emphasis added*)
- 300 Michael Denton, *Evolution: A Theory in Crisis*, Burnett Books, London, 1985, pp. 290-291. (*emphasis added*)
- 301 Hervé Philippe and Patrick Forterre, "The Rooting of the Universal Tree of Life

- is Not Reliable," *Journal of Molecular Evolution*, vol 49, 1999, p. 510.
- <sup>302</sup> James Lake, Ravi Jain ve Maria Rivera, "Mix and Match in the Tree of Life," *Science*, vol. 283, 1999, p. 2027.
- <sup>303</sup> Carl Woese, "The Universel Ancestor," *Proceedings of the National Academy of Sciences*, USA, 95, (1998) p. 6854.
- <sup>304</sup> Elizabeth Pennisi, "Is It Time to Uproot the Tree of Life?" *Science*, vol. 284, no. 5418, 21 May 1999, p. 1305.
- <sup>305</sup> Jonathan Wells, *Icons of Evolution*, Regnery Publishing, 2000, p. 51.
- <sup>306</sup> Dr. Lee Spetner, "Lee Spetner/Edward Max Dialogue: Continuing an exchange with Dr. Edward E. Max," 2001, <http://www.trueorigin.org/spetner2.asp>
- <sup>307</sup> Dr. Lee Spetner, "Lee Spetner/Edward Max Dialogue: Continuing an exchange with Dr. Edward E. Max," 2001, <http://www.trueorigin.org/spetner2.asp>
- <sup>308</sup> Dr. Lee Spetner, "Lee Spetner/Edward Max Dialogue: Continuing an exchange with Dr. Edward E. Max," 2001, <http://www.trueorigin.org/spetner2.asp>
- <sup>309</sup> Dr. Lee Spetner, "Lee Spetner/Edward Max Dialogue: Continuing an exchange with Dr. Edward E. Max," 2001, <http://www.trueorigin.org/spetner2.asp>
- <sup>310</sup> Francisco J. Ayala, "The Mechanisms of Evolution," *Scientific American*, Vol. 239, September 1978, p. 64.
- <sup>311</sup> Dr. Lee Spetner, "Lee Spetner/Edward Max Dialogue: Continuing an exchange with Dr. Edward E. Max," 2001, <http://www.trueorigin.org/spetner2.asp>
- <sup>312</sup> S. R. Scadding, "Do 'Vestigial Organs' Provide Evidence for Evolution?," *Evolutionary Theory*, vol. 5, May 1981, p. 173.
- <sup>313</sup> *The Merck Manual of Medical Information*, Home edition, Merck & Co., Inc. The Merck Publishing Group, Rahway, New Jersey, 1997.
- <sup>314</sup> H. Enoch, *Creation and Evolution*, New York, 1966, pp. 18-19.
- <sup>315</sup> Charles Darwin, *Origin of Species*, <http://www.zoo.uib.no/classics/darwin/origin.chap14.html>.
- <sup>316</sup> R. Mcneill Alexander, "Biomechanics: Damper For Bad Vibrations," *Nature*, 20-27 December 2001.
- <sup>317</sup> R. Mcneill Alexander, "Biomechanics: Damper For Bad Vibrations," *Nature*, 20-27 December 2001.
- <sup>318</sup> Behe's Seminar in Princeton, 1997
- <sup>319</sup> G. G. Simpson, W. Beck, *An Introduction to Biology*, Harcourt Brace and World, New York, 1965, p. 241.
- <sup>320</sup> Ken McNamara, "Embryos and Evolution," *New Scientist*, vol. 12416, 16 October 1999. (*emphasis added*)
- <sup>321</sup> Keith S. Thomson, "Ontogeny and Phylogeny Recapitulated," *American Scientist*, vol. 76, May/June 1988, p. 273.
- <sup>322</sup> Francis Hitching, *The Neck of the Giraffe: Where Darwin Went Wrong*, Ticknor and Fields, New York, 1982, p. 204.
- <sup>323</sup> Elizabeth Pennisi, "Haeckel's Embryos: Fraud Rediscovered," *Science*, 5 September, 1997. (*emphasis added*)
- <sup>324</sup> Elizabeth Pennisi, "Haeckel's Embryos: Fraud Rediscovered," *Science*, 5 September, 1997. (*emphasis added*)
- <sup>325</sup> Elizabeth Pennisi, "Haeckel's Embryos: Fraud Rediscovered," *Science*, 5 September, 1997. (*emphasis added*)
- <sup>326</sup> Mahlon B. Hoagland, *The Roots of Life*, Houghton Mifflin Company, 1978, p.18
- <sup>327</sup> Prof. Dr. Ali Demirsoy, *Kalitim ve Evrim (Inheritance and Evolution)*, Ankara, Meteksan Yayınları, p. 79.

- 328 Robert A. Wallace, Gerald P. Sanders, Robert J. Ferl, *Biology, The Science of Life*, Harper Collins College Publishers, p. 283.
- 329 Darnell, "Implications of RNA-RNA Splicing in Evolution of Eukaryotic Cells," *Science*, vol. 202, 1978, p. 1257.
- 330 Prof. Dr. Ali Demirsoy, *Kalıtım ve Evrim* (Inheritance and Evolution), Meteksan Publications, Ankara, p.79.
- 331 "Book Review of Symbiosis in Cell Evolution," *Biological Journal of Linnean Society*, vol. 18, 1982, pp. 77-79.
- 332 D. Lloyd, *The Mitochondria of Microorganisms*, 1974, p. 476.
- 333 Gray & Doolittle, "Has the Endosymbiont Hypothesis Been Proven?," *Microbiological Review*, vol. 30, 1982, p. 46.
- 334 Wallace-Sanders-Ferl, *Biology: The Science of Life*, 4<sup>th</sup> edition, Harper Collins College Publishers, p. 94.
- 335 Mahlon B. Hoagland, *The Roots of Life*, Houghton Mifflin Company, 1978, p. 145.
- 336 Whitfield, *Book Review of Symbiosis in Cell Evolution*, *Biological Journal of Linnean Society*, 1982, pp. 77-79.
- 337 Milani, Bradshaw, *Biological Science, A Molecular Approach*, D. C.Heath and Company, Toronto, p. 158 .
- 338 David Attenborough, *Life on Earth*, Princeton University Press, Princeton, New Jersey, 1981, p. 20.
- 339 Prof. Dr. Ali Demirsoy, *Kalıtım ve Evrim* (Inheritance and Evolution), Meteksan Publications, Ankara, p. 80.
- 340 Hoimar Von Dittfurth, *Im Anfang War Der Wasserstoff* (Secret Night of the Dinosaurs), pp. 60-61.
- 341 "Ancient Alga Fossil Most Complex Yet," *Science News*, vol. 108, September 20, 1975, p. 181.
- 342 Hoimar Von Dittfurth, *Im Anfang War Der Wasserstoff* (Secret Night of the Dinosaurs), p. 199.
- 343 E. C. Olson, *The Evolution of Life*, The New American Library, New York, 1965, p. 94.
- 344 Chester A. Arnold, *An Introduction to Paleobotany*, McGraw-Hill Publications in the Botanical Sciences, McGraw-Hill Book Company, Inc., New York, 1947, p. 7.
- 345 Chester A. Arnold, *An Introduction to Paleobotany*, McGraw-Hill Publications in the Botanical Sciences, McGraw-Hill Book Company, Inc., New York, 1947, p. 334.
- 346 N. F. Hughes, *Paleobiology of Angiosperm Origins: Problems of Mesozoic Seed-Plant Evolution*, Cambridge University Press, Cambridge, 1976, pp. 1-2.
- 347 Daniel Axelrod, *The Evolution of Flowering Plants, in The Evolution Life*, 1959, pp. 264-274.
- 348 Charles Darwin, *The Origin of Species: A Facsimile of the First Edition*, Harvard University Press, 1964, p. 189. (*emphasis added*)
- 349 Peter van Inwagen, Review about Michael Behe's *Darwin's Black Box*.
- 350 Prof. Dr. Ali Demirsoy, *Kalıtım ve Evrim* (Inheritance and Evolution), Meteksan Publications, Ankara, p. 475. (*emphasis added*)
- 351 Norman Macbeth, *Darwin Retried: An Appeal to Reason*, Harvard Common Press, 1971, p. 131.
- 352 Cemal Yildirim, *Evrim Kurami ve Bagnazlık* (Theory of Evolution and Bigotry), Bilgi Publications, January 1989, pp. 58-59. (*emphasis added*)
- 353 Michael J. Behe, *Darwin's Black Box*, The Free Press, New York, 1996, p. 18.
- 354 Michael J. Behe, *Darwin's Black Box*, The

Free Press, New York, 1996, pp. 18-21.

<sup>355</sup> Michael J. Behe, *Darwin's Black Box*, The Free Press, New York, 1996, p. 22. (*emphasis added*)

<sup>356</sup> J. R. P. Angel, "Lobster Eyes as X-ray Telescopes," *Astrophysical Journal*, 1979, No. 233, pp. 364-373. See also B. K. Hartline (1980), "Lobster-Eye X-ray Telescope Envisioned," *Science*, No. 207, p. 47, cited in Michael Denton, *Nature's Destiny*, The Free Press, 1998, p. 354.

<sup>357</sup> M. F. Land, "Superposition Images are Formed by Reflection in the Eyes of Some Oceanic Decapod Crustacea," *Nature*, 1976, vol. 263, pp. 764-765.

<sup>358</sup> Jeff Goldberg, "The Quivering Bundles That Let Us Hear," *Seeing, Hearing, and Smelling the World*, A Report from the Howard Hughes Medical Institute, p. 38.

<sup>359</sup> Veysel Atayman, "Maddeci 'Madde', Evrimci Madde" (Materialist 'Matter', Evolutionist Matter), *Evrensel News Paper*, 13 June 1999. (*emphasis added*)

<sup>360</sup> Michael Denton, *Evolution: A Theory in Crisis*, Burnett Books, London, 1985, p. 351.

<sup>361</sup> Duane T. Gish, "The Mammal-like Reptiles," *Impact*, no. 102, December 1981.

<sup>362</sup> "Ear / Evolution of the Ear" *Grolier Academic Encyclopedia*, 1986, p. 6. (*emphasis added*)

<sup>363</sup> William E. Duruelleman & Linda Trueb, "The Gastric Brooding Frog," McGraw-Hill Book com., 1986.

<sup>364</sup> Jeremy Rifkin, *Entropy: A New World View*, Viking Press, New York, 1980, p. 6.

<sup>365</sup> J. H. Rush, *The Dawn of Life*, New York, Signet, 1962, p. 35.

<sup>366</sup> Roger Lewin, "A Downward Slope to Greater Diversity," *Science*, vol. 217, 24 September, 1982, p. 1239.

<sup>367</sup> George P. Stravropoulos, "The Frontiers

and Limits of Science," *American Scientist*, vol. 65, November-December 1977, p. 674.

<sup>368</sup> Jeremy Rifkin, *Entropy: A New World View*, Viking Press, New York, 1980, p. 55.

<sup>369</sup> John Ross, *Chemical and Engineering News*, 27 July, 1980, p. 40. (*emphasis added*)

<sup>370</sup> "From Complexity to Perplexity," *Scientific American*, May 1995.

<sup>371</sup> Cosma Shalizi, "Ilya Prigogine," October 10, 2001, [www.santafe.edu/~shalizi/notebooks/prigogine.html](http://www.santafe.edu/~shalizi/notebooks/prigogine.html). (*emphasis added*)

<sup>372</sup> Joel Keizer, "Statistical Thermodynamics of Nonequilibrium Processes," Springer-Verlag, Berlin, 1987, p. 360-1. (*emphasis added*)

<sup>373</sup> Cosma Shalizi, "Ilya Prigogine," October 10, 2001, [www.santafe.edu/~shalizi/notebooks/prigogine.html](http://www.santafe.edu/~shalizi/notebooks/prigogine.html). (*emphasis added*)

<sup>374</sup> F. Eugene Yates, *Self-Organizing Systems: The Emergence of Order*, "Broken Symmetry, Emergent Properties, Dissipative Structures, Life: Are They Related," Plenum Press, New York, 1987, pp. 445-457. (*emphasis added*)

<sup>375</sup> F. Eugene Yates, *Self-Organizing Systems: The Emergence of Order*, "Broken Symmetry, Emergent Properties, Dissipative Structures, Life: Are They Related" (NY: Plenum Press, 1987), p. 447.

<sup>376</sup> Ilya Prigogine, Isabelle Stengers, *Order Out of Chaos*, Bantam Books, New York, 1984, p. 175.

<sup>377</sup> Jeffrey S. Wicken, "The Generation of Complexity in Evolution: A Thermodynamic and Information-Theoretical Discussion," *Journal of Theoretical Biology*, vol. 77, April 1979, p. 349.

<sup>378</sup> Charles B. Thaxton, Walter L. Bradley

- & Roger L. Olsen, *The Mystery of Life's Origin: Reassessing Current Theories*, 4<sup>th</sup> edition, Dallas, 1992, p. 151.
- 379 C. B. Thaxton, W. L. Bradley, and R. L. Olsen, *The Mystery of Life's Origin: Reassessing Current Theories*, Lewis and Stanley, Texas, 1992, p. 120. (*emphasis added*)
- 380 I. Prigogine, G. Nicolis ve A. Babloyants, "Thermodynamics of Evolution," *Physics Today*, November 1972, vol. 25, p. 23. (*emphasis added*)
- 381 Fred Hoyle, *The Intelligent Universe*, Michael Joseph, London, 1983, p. 20-21. (*emphasis added*)
- 382 Andrew Scott, "Update on Genesis," *New Scientist*, vol. 106, May 2<sup>nd</sup>, 1985, p. 30. (*emphasis added*)
- 383 Robert Shapiro, *Origins: A Sceptics Guide to the Creation of Life on Earth*, Summit Books, New York, 1986, p. 207. (*emphasis added*)
- 384 *Encyclopædia Britannica*, "Modern Materialism." (*emphasis added*)
- 385 Werner Gitt, *In the Beginning Was Information*, CLV, Bielefeld, Germany, pp. 107, 141. (*emphasis added*)
- 386 George C. Williams, *The Third Culture: Beyond the Scientific Revolution*, Simon & Schuster, New York, 1995, pp. 42-43. (*emphasis added*)
- 387 Pierre P. Grassé, *The Evolution of Living Organisms*, 1977, p. 168.
- 388 Alan Woods, Ted Grant. "Marxism and Darwinism," *Reason in Revolt: Marxism and Modern Science*, London, 1993 .
- 389 Douglas Futuyma, *Evolutionary Biology*, 2. b., MA: Sinauer, Sunderland, 1986, p. 4. (*emphasis added*)
- 390 Alan Woods, Ted Grant, "Marxism and Darwinism," *Reason in Revolt: Marxism and Modern Science*, London, 1993. (*emphasis added*)
- 391 Richard Lewontin, "The Demon-Haunted World," *The New York Review of Books*, January 9, 1997, p. 28. (*emphasis added*)
- 392 Hoimar Von Dithfurth, *Im Anfang War Der Wasserstoff* (Secret Night of the Dinosaurs), vol. 2, p. 64. (*emphasis added*)
- 393 Prof. Dr. Ali Demirsoy, *Kalitim ve Evrim* (Inheritance and Evolution), Meteksan Publishing Co., Ankara, 1984, p. 61. (*emphasis added*)
- 394 Ali Demirsoy, *Kalitim ve Evrim* (Inheritance and Evolution), Meteksan Publishing Co., Ankara, 1984, p. 61. (*emphasis added*)
- 395 Ali Demirsoy, *Kalitim ve Evrim* (Inheritance and Evolution), Meteksan Publishing Co., Ankara, 1984, p. 94-95. (*emphasis added*)
- 396 Michael J. Behe, *Darwin's Black Box*, The Free Press, New York, 1996, pp. 252-53.
- 397 Orhan Hançerlioğlu, *Düşünce Tarihi* (History of Idea), Remzi Kitabevi, İstanbul: 1987, p.432.
- 398 Orhan Hançerlioğlu, *Düşünce Tarihi* (History of Idea), Remzi Kitabevi, İstanbul: 1987, p.447.
- 399 Frederick Vester, *Denken, Lernen, Vergessen*, vga, 1978, p. 6.
- 400 George Politzer, *Principes Fondamentaux de Philosophie*, Editions Sociales, Paris, 1954, pp. 38-39-44.
- 401 *Bilim ve Teknik* Magazine (Science and Technology), No. 227, p. 6-7.
- 402 R.L.Gregory, *Eye and Brain: The Psychology of Seeing*, Oxford University Press Inc. New York, 1990, p.9. (*emphasis added*)
- 403 George Berkeley, *A Treatise Concerning*

- the Principles of Human Knowledge*, 1710, Works of George Berkeley, vol. I, ed. A. Fraser, Oxford, 1871. (*emphasis added*)
- <sup>404</sup> Lincoln Barnett, *The Universe and Dr. Einstein*, William Sloane Associate, New York, 1948, p. 20. (*emphasis added*)
- <sup>405</sup> Bertrand Russell, *ABC of Relativity*, George Allen and Unwin, London, 1964, pp. 161-162. (*emphasis added*)
- <sup>406</sup> George Berkeley, *A Treatise Concerning the Principles of Human Knowledge*, 1710, Works of George Berkeley, vol. I, ed. A. Fraser, Oxford, 1871 p. 35-36. (*emphasis added*)
- <sup>407</sup> Ali Demirsoy, *Kalitim ve Evrim (Inheritance and Evolution)*, p.4. (*emphasis added*)
- <sup>408</sup> Bertrand Russell, *What is the Soul?*, Works of George Berkeley, vol. I, ed. A. Fraser, Oxford, 1871. (*emphasis added*)
- <sup>409</sup> Bertrand Russell, *Three Dialogues Between Hylas and Philonous*, Works of George Berkeley, vol. I, ed. A. Fraser, Oxford, 1871. (*emphasis added*)
- <sup>410</sup> George Politzer, *Principes Fondamentaux de Philosophie*, Editions Sociales, Paris, 1954, p. 40.
- <sup>411</sup> *Bilim ve Teknik Magazine (Science and Technology)*, No:111, p.2. (*emphasis added*)
- <sup>412</sup> R.L.Gregory, *Eye and Brain: The Psychology of Seeing*, Oxford University Press Inc. New York, 1990, p.9.
- <sup>413</sup> Ken Wilber, *Holographic Paradigm and Other Paradoxes*, p.20. (*emphasis added*)
- <sup>414</sup> Bertrand Russell, *ABC of Relativity*, George Allen and Unwin, London, 1964, pp. 161-162. (*emphasis added*)
- <sup>415</sup> Henri Bergson, *Matter and Memory*, Zone Books, New York, 1991. (*emphasis added*)
- <sup>416</sup> David Hume, *A Treatise of Human Nature*, Book I, Section IV: Of Personal Identity. (*emphasis added*)
- <sup>417</sup> İmam Rabbani, Hz. Mektupları (*Letters of Rabbani*), Vol II, 357. Letter, p. 163. (*emphasis added*)
- <sup>418</sup> François Jacob, *Le Jeu Des Possibles*, University of Washington Press, 1982, p. 111. (*emphasis added*)
- <sup>419</sup> Lincoln Barnett, *The Universe and Dr. Einstein*, William Sloane Associate, New York, 1948, p. 52-53. (*emphasis added*)
- <sup>420</sup> Lincoln Barnett, *The Universe and Dr. Einstein*, William Sloane Associate, New York, 1948, p. 17. (*emphasis added*)
- <sup>421</sup> Lincoln Barnett, *The Universe and Dr. Einstein*, William Sloane Associate, New York, 1948, p. 58.
- <sup>422</sup> Paul Strathern, *The Big Idea: Einstein and Relativity*, Arrow Books, 1997, p. 57.
- <sup>423</sup> Isaac Asimov, *Frontiers*.
- <sup>424</sup> Lincoln Barnett, *The Universe and Dr. Einstein*, William Sloane Associate, New York, 1948, p. 58. (*emphasis added*)

## INDEX

- A**  
 Aborigines (native Australians), 148, 160, 162, 169  
*Acantherpestes major* 112  
*Acanthostega*, 71  
 adaptation 13, 39, 71, 79, 95, 115, 130, 131, 188, 272  
 air sac (alveoli), 32, 92, 93, 94, 95, 96  
 AL 666-1, 177  
 Alberch, Pere, 234  
 albinism, 30  
 algae, 51, 267, 268, 269, 271  
*Ambulocetus*, 122, 123, 125, 126, 127, 128, 133, 136  
 American Museum of Natural History, 45, 111, 139, 187  
 amino acids 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 207, 208, 209, 210, 211, 212, 213, 214, 215, 216, 217, 222, 225, 240, 242, 266, 298, 303, 304  
 amniotic egg, 79  
 ammonite, 77, 207, 209, 210, 212  
 amphibians, 63, 68, 71, 74, 78, 79, 80, 236  
 Amud I skull, 165  
 Anderson, Philip W., 300  
 angiosperms, 271, 272  
*Ankylosaurus*, 92  
 antibiotic resistance, 246, 247, 249  
 apes, 148, 149, 150, 151, 152, 153, 154, 155, 156, 157, 158, 164, 170, 172, 173, 177, 180, 181, 186, 187, 206, 237, 252, 335  
 appendix, 167, 251, 252, 254  
 arboreal theory, 88  
*Archaeofructus*, 270  
*Archaeocetea*, 125, 126, 133  
*Archaeopteryx*, 88, 100, 101, 102, 103, 104, 105, 106, 137  
*archaic homo sapiens*, 159, 169, 171, 178  
 Arnold, Chester A., 271  
 arthropods, 61, 230  
 Atapuerca, 173, 174, 175  
 Atayman, Veysel, 289, 290, 291  
 atmosphere, 189, 206, 208, 209, 210, 211, 212, 215, 221, 269  
 Auger, Paul, 218  
 aural system, 128  
*Australopithecus*, 148, 149, 150, 151, 152, 154, 155, 156, 157, 158, 164, 170, 171, 172, 175, 179  
*Australopithecus afarensis*, 150, 151, 152, 153, 177, 179  
*Australopithecus africanus*, 150, 157, 171  
*Australopithecus boisei*, 150  
*Australopithecus robustus*, 150, 151, 185  
 avian lung, 92, 93, 96  
 Axelrod, Daniel, 272  
 Ayala, Francisco, 249
- B**  
 bacteria, 15, 22, 33, 34, 46, 51, 196, 199, 246, 247, 248, 249, 250, 259, 260, 261, 265, 266, 267, 268, 275, 276, 285, 322  
 Bada, Jeffrey, 206  
 Barnett, Lincoln, 329, 345, 349  
*Basilosaurus*, 126, 127  
*Bathybius haeckelii*, 192  
 Beck, C. B., 255  
 Beer, Gavin De, 234  
 Behe, Michael, J., 254, 275, 280, 282, 316  
 Bengtson, Stefan, 63  
 Berkeley, George, 325, 328, 329, 332, 333, 342  
 beta-globin, 218  
 Big Bang theory, 312  
 biogenetic law, 254, 255, 256  
*Biomechanics in Evolution*, 113  
 bipedalism, 180, 181  
*Birkenia*, 66  
 Bishop, Martin, 241  
 Bliss, Richard, 209  
 Blum, Harold, F., 197  
 Bohlin, Raymond, 143  
 bony fishes, 65  
 Brace, C. Loring, 154, 157  
 Bricmont, Jean, 301  
 British Museum, 23, 185, 186, 187  
 Bromage, Tim, 157  
 Brush, A. H., 97  
 Bryan, William, 187  
 Burbank, Luther, 37
- C**  
 Caecilians, 72  
 Cambrian age, 53, 54, 56, 57, 58, 60, 61, 62, 63, 64  
 L. Camp, A. L., 125, 127  
 cancer, 30  
 Carboniferous, 113, 270, 272  
 Carroll, Robert L., 40, 43, 44, 65, 70, 71, 79, 81, 82, 88, 101, 127  
 Cech, Thomas, 221  
 cell, 12, 15, 20, 27, 33, 51, 54, 56, 120, 132, 189, 190, 191, 192, 193, 194, 195, 197, 206, 208, 216, 217, 221, 222, 223, 224, 225, 226, 238, 240, 247, 251, 259, 260, 261, 262, 263, 264, 265, 266, 267, 269, 273, 275, 276, 279, 280, 281, 282, 283, 284, 285, 287, 288, 289, 290, 298, 301, 304, 305, 306, 307, 310, 315, 347  
*cephalochordates*, 65

- Chad, 172  
 Chadwick, D. H., 130  
 chemical evolution, 206, 207, 220, 305  
 chemical reaction, 194, 204, 205, 210, 213, 225, 302, 306, 336, 338  
 Chen, C. T., 209  
 chlorophyll, 262, 266  
 chloroplast, 262, 263, 264, 265, 266  
*Chordata* phylum, 63, 64, 238  
 chromosome, 240  
 Clark, Le Gros, 187  
 Coates, M., 236  
*Coelacanth*, 70, 72, 73, 74  
 Cold trap (Miller Experiment), 208, 209, 211  
 Committee on Genetic Effects of Atomic Radiation, 28  
 common ancestor, 35, 40, 52, 53, 55, 60, 133, 147, 228, 230, 233, 234, 236, 237, 238, 245  
 communism, 146  
*Confuciusornis*, 105, 106  
 Conkey, Margaret, 168  
 craniates, 65  
 Cretaceous, 81  
 Crick, Francis, 216, 218, 220, 223  
 Cro-Magnon man, 159, 169, 170  
 Crompton, Robin, 181  
 Cronin, J. E., 157  
*Crossopterygian* subclass, 71  
 cursorial theory, 88, 111  
*cyanobacteria*, 262  
*Cynodictis gregarius*, 138  
 cytochrome-C, 196, 240, 314  
 cytoskeleton, 194, 262
- D**  
 Darwin, Charles Robert, 12, 13, 14, 15, 16, 17, 18, 19, 21, 22, 23, 26, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 48, 49, 60, 61, 62, 63, 96, 100, 140, 147, 192, 198, 228, 234, 245, 251, 252, 271, 273, 274, 275, 276, 278, 279, 280, 282, 293, 311  
 Darwinism, 12, 13, 17, 19, 20, 21, 26, 37, 39, 48, 52, 53, 56, 57, 61, 62, 78, 82, 96, 100, 119, 120, 142, 146, 172, 181, 188, 226, 254, 273, 274, 275, 293, 317, 322  
 Dawkins, Richard, 55, 145, 203  
 Dawson, Charles, 185  
 Deem, Richard L., 104  
 Deevey, Edward, 37  
 Demick, David A., 30  
 Demirsoy, Ali, 68, 219, 260, 262, 267, 277, 314, 315, 330  
 Denton, Michael, 19, 31, 79, 92, 93, 95, 96, 135, 191, 221, 233, 236, 243, 290  
*Descent of Man*, 147  
*Developmental Biology*, 38  
 Devonian Age, 67, 71, 111  
*Dimorphodon*, 137  
*Dinilysia*, 81  
 dissipative structures, 300, 300, 301  
 Ditfurth, Hoimar von, 268, 290, 314  
 DNA, 12, 27, 33, 59, 134, 142, 194, 197, 200, 216, 217, 218, 219, 220, 221, 223, 225, 233, 237, 238, 239, 240, 243, 244, 259, 260, 261, 263, 264, 265, 295, 303, 305, 307, 308, 309, 310  
 Dobzhansky, Theodosius, 17, 18, 238  
 Dominican Republic, 70  
 Doppler effect, 120  
 Dose, Klaus, 206  
 Down syndrome, 30
- Dromaeosaur*, 100, 104  
*Drosophila melanogaster*, 31, 34  
 Dunbar, Carl O., 101  
 dwarfism, 30
- E**  
 Eddington, Sir Arthur, 295  
 Einstein, Albert, 295, 345, 346, 347, 349  
 Eldredge, Niles, 44, 45, 139, 143, 145  
 Ellington, C., 113  
 embryological recapitulation, 19  
 embryology, 108, 110, 233, 246, 258  
 endoplasmic reticulum, 194, 263  
 endosymbiosis hypothesis, 263, 264  
 Enoch, H., 252  
*Eoalulavis*, 105  
 Eocene period, 118  
*Eohippus*, 118, 119  
*Equus*, 119  
 Erbrich, Paul, 241  
*Escherichia coli*, 34  
*Eudimorphodon*, 83  
 eukaryotic cells, 260, 262, 263  
*Eusthenopteron*, 71  
 evolutionary pressure, 129  
 evolutionary tree of life, 125, 172, 243, 271
- F**  
 Faber, Betty, 111  
 "feathered dinosaur", 98, 106, 107, 108, 109  
 Feduccia, Alan, 90, 98, 105, 110  
 Ferreras, Arsuaga, 174  
 Ferris, J. P., 209  
 Finches, 13, 39, 40  
 Fink, Bob, 164, 166, 167  
 Fix, William, 147, 237  
 fluorine testing, 186  
 flying reptiles, 83  
 Fox, Sydney, 214, 215, 221

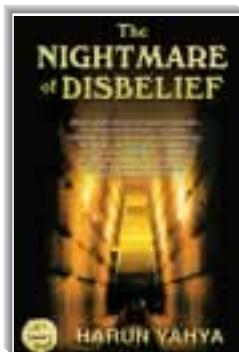
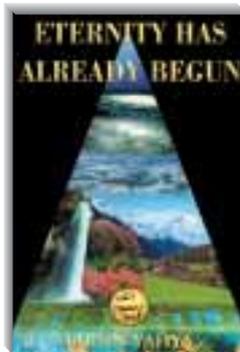
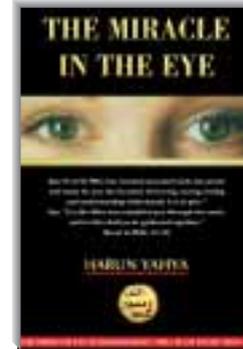
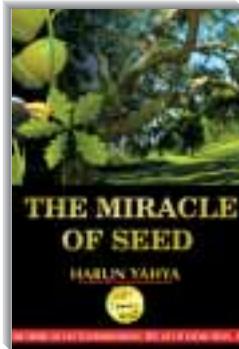
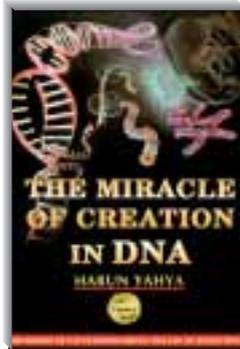
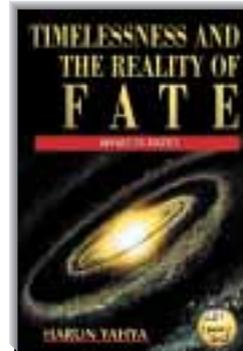
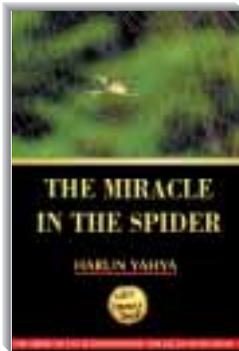
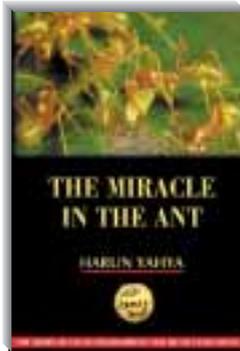
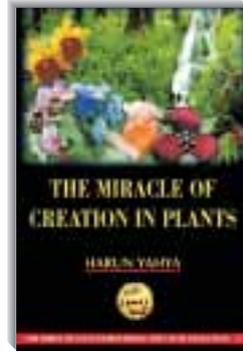
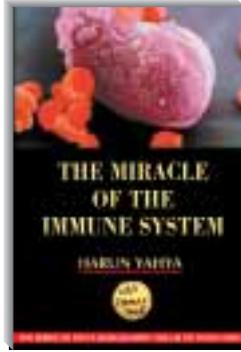
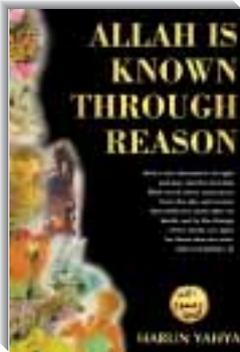
- Fox's experiment, 214, 215  
 Friday, Adrian, 241  
 frogs, 29, 70, 72, 76, 234, 240, 293  
 fruit flies, 18, 28, 29, 33  
 Futuyma, Douglas, 59, 134, 311
- G**  
 gallinaceous birds, 102  
 gene pool, 309  
 genes, 76, 235, 239, 245, 248  
 genetic information, 12, 18, 21, 27, 33, 35, 36, 37, 38, 128, 129, 141, 225, 247, 248, 249, 259  
 genetic stability (genetic homeostasis), 17, 36  
 Gee, Henry, 70, 71, 130, 172, 173, 183  
 Geological Society of America, 17, 18  
 George, Neville, T., 45  
 George Washington University, 172  
 Gilbert, Walter, 221  
 Gingerich, P. D., 123  
 Gish, Duane T., 83  
 Gitt, Werner, 307  
 Godfrey, L. R., 121  
 golgi apparatus, 194, 263  
 Gondwanaland, 231  
 Gould, Stephen Jay, 26, 43, 44, 45, 58, 80, 139, 140, 143, 145, 146, 171, 311  
 gradual development model, 44, 58, 88, 181  
 Gran Dolina, 174, 175  
 Grassé, Paul Pierre, 23, 31, 34, 41, 113, 226, 310  
 Gray, Asa, 100  
 Gregory, R. L., 327, 335  
 Gregory, William, 187  
 GTP, 281
- H**  
 Haeckel, Ernst, 52, 192, 254, 255, 256, 257, 258  
*Halitherium*, 138  
 hemoglobin, 30, 240, 241  
 Harvard University, 43, 47, 139, 171, 172, 184, 312  
*Hesperopithecus haroldcooki*, 187  
 heterozygous individuals, 144  
 Hitching, Francis, 43  
 Hoagland, Mahlon B., 264  
 Hofstadter, D., 220  
 Hohenberg, P., 299  
 hominids 155, 171, 172, 179  
*Homo antecessor*, 175  
*Homo erectus*, 149, 150, 154, 155, 157, 159, 160, 161, 162, 163, 164, 170, 171, 175, 178  
*Homo ergaster*, 160  
*Homo habilis*, 149, 150, 154, 155, 156, 157, 158, 160, 164, 170, 171, 175, 177  
*Homo heidelbergensis*, 169, 170  
*Homo rudolfensis*, 156, 157, 158, 164, 171  
*Homo sapiens*, 148, 149, 150, 159, 161, 163, 164, 165, 169, 171, 173, 174, 175, 177, 178, 179  
*Homo sapiens sapiens*, 150, 159, 178  
 homology, 19, 103, 104, 228, 229, 232, 233, 234, 235, 236, 237, 244  
 homozygous, 144  
 Hooten, Earnst A., 184  
 Hopeful Monster theory, 140  
 Horgan, John, 206, 219, 222, 224  
 Hou, Lianhai, 105  
 Hoyle, Fred, 193, 198, 304  
 Hughes, N. F., 272  
 Hume, David, 338  
 Huxley, Julian, 17, 18, 23  
 hydrogen, 207, 209, 212, 290  
*Hylonomus*, 80, 135
- Hyrax*, 119, 138
- I**  
*Icaronycteris*, 121, 137  
*Ichthyosaur*, 85, 86, 135  
*Ichthyostega*, 71, 72, 73  
 (immunity to) DDT, 246, 249  
 inner ear, 128, 129, 155, 156, 170, 286, 287, 288, 289, 290, 291, 327  
*insecta* phylum, 111  
 intelligent design, 11, 220, 221, 226, 239, 275  
 Inuits, 148, 159, 163, 178  
 Inwagen, I. van, 275  
 irreducible complexity, 26, 88, 193, 233, 275, 284, 292
- J**  
 Jacob, François, 344  
 Jacob, Homer, 219  
 Java man, 149, 160  
 Jepsen, Glen, L., 17  
 Johannsen, W. L., 37  
 Johanson, Donald C., 151, 166, 175  
 Johnson, Phillip, 56, 146  
*Journal of Heredity*, 17  
 Joyce, Gerald, 222  
 Jurassic Age, 47, 72, 270
- K**  
 Kangaroos, 231  
 Kean, Kevin Mc, 209  
 Keizer, Joel, 300  
 Kenya, Kanjera region, 173  
 Kenya, Lake Rudolf, 156  
 Kenya, Lake Turkana, 160  
 Kenya, Lake Victoria, 173  
 KNM-ER 1470, 156, 157  
 KNM-ER 1472, 155  
 Kow Swamp, Australia, 161, 171  
 Kuhn, Steven L., 168  
 Kuru, Mustafa, 64
- L**  
 Laetoli footprints, 175, 176, 179

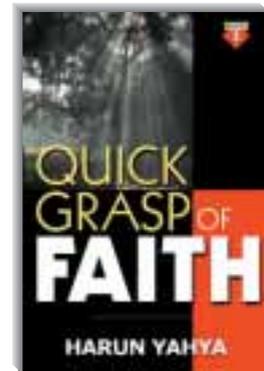
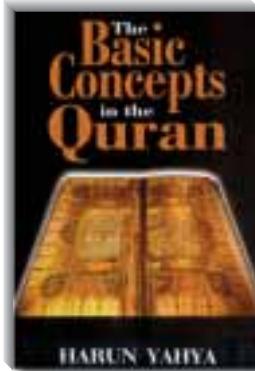
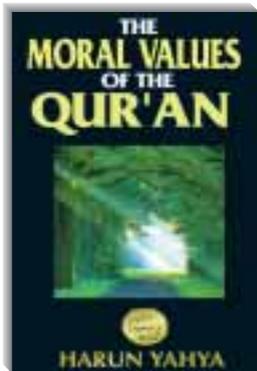
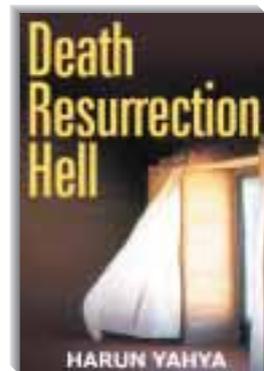
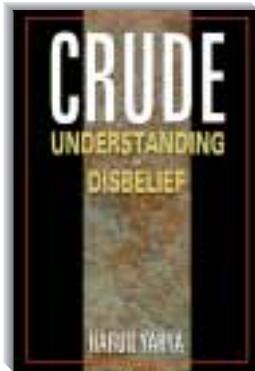
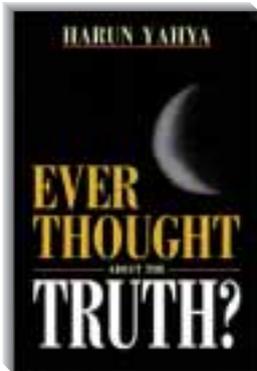
- Lamarck, Jean B., 12, 13, 16, 17, 18, 68, 129  
*Latimeria*, 74  
 Laughlin, William, 163  
 law of entropy, 294, 295, 296, 297, 299  
 Le Châtelier Principle, 213, 215  
 Leakey, Louis, 171, 173, 175  
 Leakey, Mary, 175  
 Leakey, Richard, 151, 156, 157, 162  
 Leakeys, 154  
 left-handed amino acids, 198, 199, 200  
 left-handed proteins, 198  
 Lester, Lane, 143  
 Levinton, Jeffrey S., 59  
 Lewin, Roger, 39, 56, 57, 116, 296  
 Lewontin, Richard C., 312, 313  
*Liaoningornis*, 105  
 Lieberman, Daniel, 172  
 Lipson, H. S., 14  
 lizard, 78, 81, 235  
 Lloyd, D., 263  
 lobster eye, 282, 283, 284  
 Lombard, Eric R., 117  
 Lovtrup, Soren, 188  
 Lucy (*Australopithecus afarensis*), 149, 152, 166, 179  
 lung, 32, 65, 68, 69, 73, 74, 77, 92, 93, 94, 95, 96, 122, 273, 335  
 luteinizing hormone, 251
- M**  
 Macbeth, Norman, 37  
 macroevolution, 30, 38, 39, 250  
 macromutations, 141, 142, 143, 144, 145  
 Macumber, Philip, 161  
 Malthus, Thomas Robert, 21, 22  
 Marfan's syndrome, 30  
 Margulis, Lynn, 263, 265  
 Martin, Larry, 90, 107  
 Marx, Karl, 311  
 materialism, 305, 306, 307, 309, 310, 311, 312, 313, 316  
 Mayr, Ernst, 17, 18, 32, 100, 142, 148  
 Mchedlidze, G. A., 127  
 media 106, 147, 149, 183, 185, 290, 313  
 melatonin, 251  
 Mendel, Gregor, 16, 17  
 Mesonychid family, 125  
 Mesosaurus, 135  
 Mesozoic, 67, 116  
 metamorphosis, 76, 234  
 methane, 207, 209, 210, 212  
 microevolution, 38, 39  
 microtubules, 194, 262  
 Milinkovitch, Michel, 133  
 Miller experiment, 207, 212, 224  
 Miller, Stanley, 207, 208, 209, 210, 211, 212, 214, 215, 220, 221, 223, 224  
 Miocene era, 138  
 "missing link", 42, 43, 70, 72, 74, 156, 172, 173  
 Modern Synthetic Theory of Evolution, 230  
 molecular homology, 237  
 molar teeth, 123, 151  
*Mollusca* phylum, 51  
 monera, 51  
 Monastersky, Richard, 55  
 mongolism, 30  
 monkeys, 172, 180, 235, 256, 314  
 Monod, Jacques, 223  
 monomers, 303  
 Morgan, Elaine, 181  
 morphological homology, 229  
 morphology, 43, 44, 60, 108, 155  
 Morris, Simon Conway, 58  
 mosaic creatures, 44  
 moths, 23, 24, 25, 26  
 Muhyiddin Ibn al-'Arabi, 342  
 mutations, 18, 20, 21, 27, 28, 29, 30, 31, 33, 34, 69, 71, 74, 76, 77, 83, 84, 88, 89, 96, 100, 121, 128, 129, 130, 140, 141, 142, 143, 226, 230, 231, 233, 236, 237, 246, 247, 248, 249, 250, 264, 273, 274  
*Mycoplasma hominis*, 196  
*Mysticeti* (baleen whale), 133
- N**  
 natural selection, 13, 14, 16, 17, 18, 19, 20, 21, 22, 23, 24, 26, 27, 33, 36, 37, 38, 40, 45, 57, 63, 68, 69, 79, 81, 89, 129, 132, 141, 142, 188, 195, 200, 231, 273, 274, 277, 278, 279, 280, 284, 290  
*Nature Magazine*, 124, 193  
 Neandertal Man (*H. neandertalensis*, *H. sapiens neandertalensis*), 150, 155, 159, 160, 164, 165, 166, 167, 168, 170, 171, 178  
 Nebraska Man, 187, 188  
*Nematoda* phylum, 51, 238  
 neo-Darwinism, 17, 18, 21, 23, 139, 140, 142  
 nerves, 84, 104, 281, 287, 327, 328, 329, 330, 334  
 nervous system, 22, 63  
 northern Italy, 83  
 nothosaurs, 86  
 nucleic acids, 197, 200, 216, 220, 223  
 nucleotides, 27, 200, 217, 218, 220, 222
- O**  
 Oakley, Kenneth, 186  
*Odontoceti* (toothed whale), 133  
 OH 62, 155  
 Olduvai Gorge, 171, 175  
 ontogeny recapitulates

- phylogeny, 254  
 Oparin, Alexander I., 206, 305  
*Opisthocomus hoazin*, 103  
 optic nerves, 278, 336  
 Orgel, Leslie, 220, 222, 223, 224  
*Origin of Species*, 15, 17, 35, 36, 40, 42  
*Ornithischian* birds, 92  
 Osborn, Henry Fairfield, 186, 187, 188  
*Osteolepis panderi*, 67  
 Ostrom, John, 88, 103  
 Owen, Richard, 245  
 Oxnard, Charles, 152
- P**
- Pakicetus*, 112, 123, 124, 125, 126, 127, 128, 133  
 paleoanthropologist, 63, 147, 150, 151, 154, 156, 157, 160, 164, 173, 174, 175, 179, 181, 185  
 paleobotany, 271  
*Paleothyris*, 80  
 Paleozoic tetrapods, 71  
 parabronchial tubes (birds), 96  
 parathyroid, 255  
 Pasteur, Louis, 15  
 Patterson, Colin, 23, 118  
 Peking Man, 149, 160  
 pelvis, 126, 251  
 Pennsylvanian Age, 111, 112  
 pentadactyl structure, 235, 236, 237  
 photon, 280, 281, 326  
 photosynthetic pigments, 262  
 phylogenetic link, 133  
*Pikaia*, 64, 65  
 Pilbeam, David, 147, 184  
 Piltdown man, 185, 186, 187  
*Pithecanthropus erectus*, 187  
 Pitman, Michael, 29  
 pituitary gland, 251  
 placental mammals, 231, 232  
*Plantae*, 259  
 plasmid transfer, 260  
*platypus*, 44  
 Pleiotropic Effect, 31, 32  
 Pleistocene, 173, 175  
*Plesiosaur*, 136  
 pleurocapsalean algae, 268  
 Pliocene period, 187  
 Ponnampertuma, Cyril, 221  
 preadaptation, 69  
 Precambrian, 56  
 Pribram, Karl, 336  
 Prigogine, Ilya, 298, 299, 300, 301, 302, 303  
 primordial soup, 304  
 pro-avis, 88  
 protein filaments, 262  
*Procetus*, 126  
*Prokaryotae*, 259  
 prokaryotic cells, 259, 260, 262  
 prostaglandin E2, 292  
*Prosthennops*, 187  
 proteinoids, 214, 215  
 proteins, 97, 191, 193, 194, 195, 196, 197, 198, 199, 200, 201, 202, 203, 204, 205, 206, 207, 208, 212, 213, 214, 215, 216, 218, 219, 220, 221, 222, 223, 224, 237, 238, 240, 241, 242, 243, 244, 245, 259, 261, 262, 264, 266, 275, 276, 281, 293, 295, 298, 303, 304, 307, 314, 335  
*Protista*, 51, 259  
*Protopterus*, 240  
*Pterodactylus kochi*, 84  
 punctuated equilibrium theory, 26, 139, 140, 141, 142, 143, 144, 145, 146, 26, 139, 140, 141, 142, 143, 144, 145, 146
- R**
- Rabbani, Imam, 342  
 radiations, 82  
*Ramapithecus*, 149  
 Ranganathan, B. G., 27  
 rattlesnake, 240  
 Raup, David, 61  
 Raven, Peter, 108  
 recapitulation theory, 254  
 reconstructions, 124, 183, 184, 185, 187  
 relaxin, 241, 242  
 Rensberger, Boyce, 117, 118  
*Rheobatrachus Silus*, 292, 293  
*Rhipidistians*, 71  
 rhodopsin, 281  
 ribosomes, 220, 261, 263  
 Richardson, Michael, 258  
 Rifkin, Jeremy, 296  
 right-handed amino acids, 199, 210, 211  
 RNA, 194, 200, 202, 216, 217, 219, 220, 221, 222, 223, 224, 225, 243, 262, 295  
 Robbins, Louis, 176  
*Rodhocetus*, 128  
 Ross, John, 297  
 Rush, J. H., 296  
 Russell, Bertrand, 324, 329, 331, 336
- S**
- Sahelanthropus tchadensis*, 172  
 Salisbury, Frank, 217, 230  
 Santana fossil bed, 67  
*Saurischian*, 92  
 Scadding, S. R., 250  
 Schindewolf, Otto, 140  
 Schwabe, Christian, 241, 242  
 Scott, Andrew, 304  
 Second Law of Thermodynamics, 294, 296, 297, 298, 299, 305  
 Second World War, 28  
 selective advantage, 95, 269, 274  
 self-ordering, 302  
 self-organization, 298, 299, 300, 301, 302, 303, 304, 305

- Self-Organization in Nonequilibrium Systems, 299  
*Seymouria*, 80  
 Shalizi, Cosma, 299, 300  
 Shapiro, Robert, 197  
 sharks, 77, 240  
 shrimps, 47  
 sickle cell anemia, 30  
 Silurian Age, 62  
 Simpson, George Gaylord, 17, 116, 117, 255  
*Sinosauropteryx*, 98, 106, 107  
*Smilodon*, 232  
 Smith, Holly, 155  
 Smith, J. L. B., 73  
 Smith, James D., 121  
 Smith, Maynard, 223  
 speciation, 24, 144  
 spontaneous generation, 15  
 Spoor, Fred, 155, 156  
 squirrels, 231, 318  
 Stahl, Barbara, 97, 133  
 Stanley, S. M., 49, 145  
 Stebbins, Ledyard G., 17  
 Stein, Daniel L., 300  
*Stenopterygius*, 86  
 sternum (breastbone), 101  
*Stethacanthus*, 66  
 Stiner, Mary C., 168  
 stirrup, 286, 287, 289, 290, 291  
 Stokes, William, 197  
 Stravropoulos, George, 296  
*Struthiomimus*, 92  
 symmetrical feathers, 191
- T**  
 Tasmanian wolf, 125, 231, 232, 233  
 taxonomy, 50  
 Taylor, Gordon R., 16, 28, 119  
 Tertiary, 34, 121  
 tetrapods (quadrupeds), 68, 70, 71, 72, 74, 80, 235, 241  
 The Burgess Shale fossil bed, 57, 58  
 the Theory of General Relativity, 345, 346, 347, 349  
 theropod dinosaurs, 103, 104, 110  
 Thewissen, Hans, 134  
 Thorne, Alan, 161, 163  
 Thomson, K. S., 43  
 Thorpe, W. H., 193  
*Thylacosmilus*, 232  
 thymus gland, 251, 255  
 thyroid gland, 251  
 Todd, Gerald T., 65  
*Touraco*, 102  
 transducin, 281  
 transition from water to land scenario, 68, 69, 74, 76, 122  
 transitional forms, 14, 19, 42, 43, 44, 45, 50, 64, 70, 71, 72, 100, 105, 117, 118, 126, 127, 149, 154, 273  
*Trends in Genetics* (TIG), 57  
 Triassic Period, 81, 82, 84, 85  
 trilobites, 54, 60, 61, 62, 63  
 Trinkaus, Erik, 164  
 Trotsky, Leon, 311  
 Turk, Ivan, 164  
 Turkana Boy, 160, 162, 174  
 Tuttle, Russell, 179
- U**  
 Upper Cretaceous Age, 81  
 Urey, Harold, 207
- V**  
 variation, 13, 14, 16, 18, 21, 35, 36, 37, 38, 39, 40, 143, 159, 162, 178, 217, 239, 279, 329  
*Velociraptor*, 100  
 Vester, Frederick, 325  
 vestigial organs, 19, 127, 246, 250, 251, 252, 253  
 Vogt, Karl, 306  
 Vries, Hugh de, 17
- W**  
 Walker, Alan D., 103, 157, 160, 171  
 walking whales, 123  
 Watson, James, 216, 220  
 Weaver, Warren, 28  
 Wesson, Robert, 45  
 whales, 86, 117, 122, 123, 125, 126, 127, 128, 129, 130, 131, 132, 133, 134, 136, 140, 244, 245, 318  
 White, Tim, 154, 175, 182  
 Whitfield, John, 172  
 Wicken, Jeffrey, 303  
 Wickramasinghe, Chandra, 198, 227  
 Wiedersheim, R., 250, 251  
 Williams, George C., 309  
 Wood, Bernard, 154, 155, 158, 172  
 Wootton, R., 113  
 Wynne-Edwards, V. C., 22  
 Wyoming, 122
- Y**  
 Yates, F. Eugene, 300  
 Yildirim, Cemal, 279
- Z**  
 Zhilman, Adrienne L., 151  
 Zhou, Zhonghe, 105  
 Zonneveld, Frans, 155  
 Zuckerman, Lord Solly, 152, 182  
*Zygorhiza kochi*, 136

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