THE ORIGIN OF BIRDS AND FLIGHT

HARUN YAHYA

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About the Author

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

Harun Yahya's works, translated into 57 different languages, constitute a collection for a total of more than 45,000 pages with 30,000 illustrations.

His pen-name is a composite of the names Harun (Aaron) and Yahya (John), in memory of the two esteemed prophets who fought against their peoples' lack of faith. The Prophet's (may Allah bless him and grant him peace) seal on his books' covers is symbolic and is linked to their contents. It represents the Qur'an (the Final Scripture) and Prophet Muhammad (may Allah bless him and grant him peace), last of the prophets. Under the guidance of the Qur'an and the Sunnah (teachings of the Prophet), the author makes it his purpose to disprove each fundamental tenet of irreligious ideologies and to have the "last word," so as to completely silence the objections raised against religion. He uses the seal of the final Prophet (may Allah bless him and grant him peace), who attained ultimate wisdom and moral perfection, as a sign of his intention to offer the last word.

All of Harun Yahya's works share one single goal: to convey the Qur'an's message, encourage readers to consider basic faith-related issues such as Allah's exinstence and unity and the Hereafter; and to expose irreligious systems' feeble foundations and perverted ideologies.

Harun Yahya enjoys a wide readership in many countries, from India to America, England to Indonesia, Poland to Bosnia, Spain to Brazil, Malaysia to Italy, France to Bulgaria and Russia. Some of his books are available in English, French, German, Spanish, Italian, Portuguese, Urdu, Arabic, Albanian, Chinese, Swahili, Hausa, Dhivehi (spoken in Mauritius), Russian, Serbo-Croat (Bosnian), Polish, Malay, Uygur Turkish, Indonesian, Bengali, Danish and Swedish.

Greatly appreciated all around the world, these works have been instrumental in many people recovering faith in Allah and gaining deeper insights into their faith. His books' wisdom and sincerity, together with a distinct style that's easy to understand, directly affect anyone who reads them. Those who seriously consider these books, can no longer advocate atheism or any other perverted ideology or materialistic philosophy, since these books are characterized by rapid effectiveness, definite results, and irrefutability. Even if they continue to do so, it will be only a sentimental insistence, since these books refute such ideologies from their very foundations. All contemporary movements of denial are now ideologically defeated, thanks to the books written by Harun Yahya.

This is no doubt a result of the Qur'an's wisdom and lucidity. The author modestly intends to serve as a means in humanity's search for Allah's right path. No material gain is sought in the publication of these works.

Those who encourage others to read these books, to open their minds and hearts and guide them to become more devoted servants of Allah, render an invaluable service.

Meanwhile, it would only be a waste of time and energy to propagate other books that create confusion in people's minds, lead them into ideological chaos, and that clearly have no strong and precise effects in removing the doubts in people's hearts, as also verified from previous experience. 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 Qur'an's moral values. The success and impact of this service are manifested in the readers' conviction.

One point should be kept in mind: The main reason for the continuing cruelty, conflict, and other ordeals endured by the vast majority of people is the ideological prevalence of disbelief. This can be ended only with the ideological defeat of disbelief and by conveying the wonders of creation and Qur'anic morality so that people can live by it. Considering the state of the world today, leading into a downward spiral of violence, corruption and conflict, clearly this service must be provided speedily and effectively, or it may be too late.

In this effort, the books of Harun Yahya assume a leading role. By the will of Allah, these books will be a means through which people in the twenty-first century will attain the peace, justice, and happiness promised in the Qur'an.

To the Reader

A special chapter is assigned to the collapse of the theory of evolution because this theory constitutes the basis of all anti-spiritual philosophies. Since Darwinism rejects the fact of creation – and therefore, Allah's existence – over the last 140 years it has caused many people to abandon their faith or fall into doubt. It is therefore an imperative service, a very important duty to show everyone that this theory is a deception. Since some readers may find the chance to read only one of our books, we think it appropriate to devote a chapter to summarize this subject.

All the author's books explain faith-related issues in light of Qur'anic verses, and invite readers to learn Allah's words and to live by them. All the subjects concerning Allah's verses are explained so as to leave no doubt or room for questions in the reader's mind. The books' sincere, plain, and fluent style ensures that everyone of every age and from every social group can easily understand them. Thanks to their effective, lucid narrative, they can be read at one sitting. Even those who rigorously reject spirituality are influenced by the facts these books document and cannot refute the truthfulness of their contents.

This and all the other books by the author can be read individually, or discussed in a group. Readers eager to profit from the books will find discussion very useful, letting them relate their reflections and experiences to one another.

In addition, it will be a great service to Islam to contribute to the publication and reading of these books, written solely for the pleasure of Allah. The author's books are all extremely convincing. For this reason, to communicate true religion to others, one of the most effective methods is encouraging them to read these books.

We hope the reader will look through the reviews of his other books at the back of this book. His rich source material on faith-related issues is very useful, and a pleasure to read.

In these books, unlike some other books, you will not find the author's personal views, explanations based on dubious sources, styles that are unobservant of the respect and reverence due to sacred subjects, nor hopeless, pessimistic arguments that create doubts in the mind and deviations in the heart.

FOREWORD

The ability to fly has been mankind's dream for thousands of years, a goal toward which thousands of scientists and researchers have expended labor, time and money. Apart from a few very primitive experiments, it became possible to make self-propelled flying vehicles only in the 20th century. This feat, which mankind managed to achieve with the accumulated technology of centuries, is something that birds—known to have existed on Earth for the last 150 million years—have always performed to perfection. Even a new-born chick will soon acquire this special ability in a matter of weeks, which humans can manage only through advanced technology. How, then, did these astonishing creatures come into being?

Everyone who examines birds realizes that like other living things, they possess perfect anatomical systems. This leads to the inevitable conclusion that they are the products of flawless creation.

Yet proponents of the theory of evolution are reluctant to admit this.

According to Darwin's theory of evolution, every living species evolved from a single common ancestor. This scenario means that the 100 million[1] or so known species must all be descended from earlier versions of one another. To account for the origin and astounding variety of plants and animals, evolutionists propose two mechanisms: natural selection and mutations. (For detailed information, see Harun Yahya, *The Evolution Deceit*, United Kingdom: Ta-Ha Publishers Ltd. and *Darwinism Refuted*, New Delhi: Goodword Books Pvt. Ltd. November 2002.)

Yet neither mechanism has the ability to give rise to any new living thing. Mutations are random, typically harmful effects caused by anomalies in the DNA and are directed towards no particular purpose. Naturally, aimless and randomly occurring coincidences cannot give rise to living things that possess planned, orderly structures designed for specific objectives. Blind chance cannot endow living things with complex organs and systems.

The more those with common sense examine life forms, the more they will realize the nonsensical nature of the theory of evolution, which bases the origins of life on chance. Perceiving design but calling it purposeless, seeing order but calling it accidental, is nothing more than a deliberate denial of the facts. At the root of this denial lie evolutionists' devotion to materialist philosophy and their bigoted reactions against the fact of creation. Rather than admit their Creator's existence, evolutionists prefer to believe that blind chance is a mighty creative force and that this concept—an expression of purposeless, unconscious happenstance—can perform miracles.

But the distorted nature of this belief is easy to see: If you strew the components of an airplane on the ground, random forces such as wind, lightning, rain and earthquakes can never make them combine into a complete, functional aircraft. In addition, all the components in this example have already been created to be mutually compatible. Nonetheless, no matter how long one waits it is impossible for the parts to assemble themselves into a complete model. This

finished product can come into being only if a conscious entity assembles all the components. Yet according to evolutionists, chance is able to produce systems incomparably more perfect than this example, as well as the most delicate balances. The logical contradiction here is obvious for anyone to see.

Every living thing is a unique marvel of creation. The proposed evolutionary mechanisms, on the other hand, lend no support to evolutionist claims. The first of these mechanisms—natural selection—assumes that those living things will survive that are best adapted to the challenges of the environment in which they live; while those unable to adapt will die out and disappear. According to evolutionists, this unconscious, automatic mode of elimination endows surviving individuals with ever-more complex organs and systems, but this claim has no valid proof or scientific basis. Observation has shown that natural selection serves only to weed out unfit individuals, but that there is no question of it endowing survivors with new organs and systems.

The well-known biologist D'Arcy Wentworth Thompson summarizes this point:

. . . We see in natural selection is not to create but to destroy—to weed, to prune, to cut down and to cast into the fire.[2]

In short, natural selection has nothing to do with the emergence of any new species. Moreover, the natural selection process, being unconscious, is unable to contribute new genetic information to living things. In other words, even if natural selection does cause change in a living thing, that change cannot transmit itself on to subsequent generations. The only mechanism that can have impacts on genes is mutation—random damage to a living thing's genetic structure, which has never been observed to add beneficial trait of any kind.[3] Claims that evolution occurs by means of natural selection are invalid, because:

1) Natural selection cannot plan or envisage an organism’s future needs, and

2) Mutations can never endow a beneficial gain that leads to progress.

Professor John W. Oller of the University of New Mexico refers to the illogical nature of this claim of development through mutation:

Accidental design adjustments, as necessary for general evolution, **are logical disasters. Random mutations** from radiation, replication errors, or other proposed sources, **rarely result in viable design adjustments, never in perfect more advanced designs.** [4]

Suppose you have determined that your life would be much more efficient if you had heat receptors in your body, or have felt the need for some other organ or ability that you think will confer an important advantage. Can you bring this about in your own body, by yourself? Could you bring into being a new organ or system that functions in a coordinated manner with immaculate timing, with all the other organs in your body, never making an error, that protects you by taking all the precautions you need and constantly strives to be beneficial to you? Could you then encode the proper genetic codes in your DNA so as to transmit this change to later generations?

That would be quite impossible, no matter how much you desired it or how much effort you expended. How, therefore, could unconscious molecules manage something that a rational

and conscious entity like yourself cannot? There is thus no scientific basis to support the claim that unconscious molecules assembled the cell and then, by chance, carried out flawless adjustments in its genetic structure.

As a result, it is impossible for one living species to develop into a bird, with its own unique features including that of flight, by any so-called evolutionary mechanism, or for birds to evolve into still other living species. The infinite variety among living things is just one indication of the infinite knowledge and creative artistry of Allah. In order to deny this, evolutionists hide behind unrealistic explanations.

Over the last 20 years, when the complexity of life has become ever more clearly understood, an increasing number of scientists have reacted against the “chance dogma” supported by the theory of evolution. When asked about the dilemmas facing the theory of evolution, for example, Michael Denton, a molecular biologist at the University of Otago in New Zealand, criticizes the claims made for random mutations:

The most serious objection I have is with the nature of mutation. Darwinism is based on the idea that all the mutations which have been selected during the course of evolution were, when they initially occurred, entirely random. Mutations are random. . . . This is the essential bedrock of Darwinism. The mutational input into living things is, as it were, at random.

Darwinism is claiming that all the adaptive structures in nature, all the organisms which have existed throughout history, were generated by the accumulation of entirely undirected mutations. That is an entirely unsubstantiated belief for which there is not the slightest evidence whatsoever.

The second problem is that there are a vast number of complex systems in nature, and no matter how unglamorous this problem is, no matter how people try to look the other way, the fact is that a huge number of highly complex systems in nature cannot be plausibly accounted for in terms of a gradual build-up of small random mutations.

Indeed, in many cases, there does not exist in the biological literature even an attempt to explain how these things have come about. A classic example would be the lung of the bird, and I could mention some other ones, but everybody knows the lung of the bird is unique in being a circulatory lung rather than a bellows lung. I think it doesn't require a great deal of profound knowledge of biology to see that an organ, which is so central to the physiology of any higher organism, its drastic modification in that way by a series of small events is almost inconceivable. This is something we can’t throw under the carpet again because, basically, as Darwin said, if any organ can be shown to be incapable of being achieved gradually in little steps, his theory would be totally overthrown.

The fact is that, in common-sense terms. . . …here are a vast number of such cases in nature. [5]

INTRODUCTION

According to one of the evolution scenario's claims, some water-dwelling amphibians developed into fully, terrestrial reptiles. One branch of this group evolved further, constituting the ancestors of today's birds.

According to evolutionist claims, these imaginary creatures descended from their alleged reptilian ancestors some 150 to 200 million years ago, acquiring new characteristics gradually and in stages until they emerged as fully-fledged birds. As this scenario requires, their attempts at flying also emerged in stages before taking on its presently flawless ability.

However, despite all the efforts expended over the last century and a half, not a single trace has ever been found of the half-bird, half-reptile creatures that evolutionists assume must once have lived. No transitional forms covered half in scales and half in feathers, or with half-developed wings, have ever been found in the Earth's geological strata. In fact, contrary to what's been conjectured, only fossils with perfect structures—the remains of flawless, fully formed living things—have ever been discovered.

But despite the absence of any evidence to support their unscientific tale, evolutionists doggedly persist in their claims, hoping that these fictitious fossils will one day be found. Their evidence for their impossible dreams go no further than outright distortions and biased interpretations of the facts, as you shall see in detail in the following chapters.

There are more than 10,000 species of birds on Earth, each of which possesses its own unique features. Hawks have very sharp eyes, broad wings and pointed talons. Their eyesight is so keen that they can make out a baby rabbit on the ground from hundreds of meters up in the air.

Plovers, weighing just a few hundred grams, flap their wings for 88 hours non-stop on the journey of 4,000 kilometers (2,485 miles) that they make every winter, crossing the ocean without mishap.

With their ability to imitate sounds including human speech, parrots are among the cleverest of living things. Although anatomy of their mouths is wholly different—they have no teeth or lips, for instance—they are able to produce sounds very similar to those they hear.

With their long beaks, the hummingbirds—the smallest known species of birds—can feed on flower nectar and the small insects they find inside flowers. In order to feed, they need to hover in the air in front of the flower, and with its specially created features, they are the only species of bird able to do so.

The owl, thanks to the special creation in its soft but rounded feathers, hunts its prey at night in complete silence. Thus the owl's wing, which prevents air turbulence—and thus, noise—has taken its place among the designs that scientists are seeking to replicate.

The albatross, whose wing span of 3.5 meters (11.48 feet) is the largest in the world, spends 92% of its life over the open sea, almost never alighting on solid ground. Albatrosses'

almost constant state of flight is made possible by their use of air currents, as they open their wings out as far as possible, without flapping them.

Jays bury the bonito fish they collect for later use. With their powerful memories, they are able to find and extract these fish even after nine months have passed, in forests where every tree resembles every other.

The way that birds show devoted behavior towards their young is also most striking. Some birds construct highly intricate nests, taking account of a great many factors during their construction. Birds living by the seashore, for example, build nests that cannot be flooded, using the appropriate materials for this. They even calculate how their future young should come to no harm in the event that water levels rise. Some marsh-dwelling birds build nests with high walls so that their eggs cannot be blown out by the wind.

How are such different types of nests, intelligent behavior and altruism, whose variety would fill many volumes, possible for these creatures, which are totally without reason or training?

It is impossible for them to have gradually developed the features they possess, because they could not have survived during the intermediate stages of any such process. Indeed, no creature has ever grown to perfection in stages, as evolutionists would have us believe. On the contrary, all different living groups have existed in their current perfect states ever since they first appeared in the Earth's geological strata.

This is scientific evidence that birds too were created, and this evidence represents a truth taught to human beings in the Qur'an: it is Allah, the Creator of all things, Who created these creatures with all the features they possess and the systems appropriate to them.

In verses, Allah reveals His dominion over the living world:

“. . . There is no creature He does not hold by the forelock.” (Surah Hud, 56)

The flawless features possessed by birds are just a few examples of the knowledge and artistry of Allah, the Lord of the Earth and sky:

“. . . The kingdom of the heavens and the Earth and everything between them belongs to Allah. He creates whatever He wills. Allah has power over all things.” (Surat al-Ma’ida, 17)

EVOLUTIONIST SCENARIOS AND DILEMMAS REGARDING THE ORIGIN OF FLIGHT

Evolutionists maintain that the alleged ancestors of birds were dinosaurs, a group of the reptile family. Yet they can't explain how dinosaurs turned into birds. Two main theses are proposed regarding the origin of flight, but each is nonsensical and devoid of evidence, being based solely on assumptions.

According to the so-called *cursorial theory*, dinosaurs turned into birds by taking to the air from the ground. The word "cursorial" comes from the Latin word *curcus*, meaning "running" or "fast movement."

According to the so-called *arboreal theory*, the alleged ancestors of birds were dinosaurs, a group of tree-dwelling reptiles that gradually developed wings by leaping from branch to branch.

Both theories are based on imagination and assumptions. There is no evidence to support either one. In the face of this difficulty, evolutionists have no alternative but to produce similar scenarios of no scientific value.

The book *Avian Visual Cognition*, edited by Dr. Robert G. Cook of Tufts University, refers to the clear nature of this speculation:

The excellence of the avian design for flight, along with the paucity of fossil evidence for transitional forms, has made the evolution of flight in birds **an area of tremendous speculation.** [6]

"Origin of Bird Flight Explained", an article in the 17 January, 2003 edition of *Scientific American*, referred to the insufficient nature of both the cursorial and the arboreal theories—although there is in fact no satisfactory explanation at all for the origin of birds:

…But both the arboreal and the cursorial scenarios have explanatory gaps. As far as tree dwellers go, of the hundreds of nonavian gliding vertebrates around today, not one flaps its appendages. And why would natural selection have favored the development of little protowings in a theropod equipped with heavily muscled legs for running across the ground? Neither theory, [Kenneth] Dial [an evolutionists biologist of The University of Montana] asserts, adequately addresses the step-by-step adaptations that led to fully developed flight mechanics. [7]

THE ORIGIN OF FLIGHT ACCORDING TO THE CURSORIAL THEORY, AND THE ERRORS THEREIN

The cursorial theory maintains that two-legged (or bipedal) reptiles began flying after a series of leaps they performed while running. It assumes that as the distance leaped increased, the reptiles used their forelegs used for balance and propulsive force, and that eventually, resulted in flight—without the need for any other supplementary means.

Initiatives to explain this utopian hypothesis have taken two forms:

The "Insect Net" Model

This model proposes that the forearms of these two-legged reptiles were able to move freely and therefore let them catch their prey easier. As feathers gradually widened, these proto-wings became increasingly more effective for chasing and catching insects. As the front legs grew ever longer, their movement enabled flight through the beating or flapping of wings observed in the present day.

This is clearly a forced model justified only by the theory of evolution.

It is impossible for unconscious structures and mechanisms to determine what is useful and what isn't and to behave with foresight in light of that. And it is extremely irrational to expect that they can bring about appropriate changes in the body. It is impossible for mutations, random and typically harmful changes, to cause structural improvements in living things. Even if we assume that mutations could have such benefits, this theory is still inconsistent: The movement that birds employ to catch insects is very different from the up-and-down movement they use for flight. To catch prey, birds need to move their wings backward and forward. Forearms developing into wings would therefore represent a disadvantage for any biped attempting to catch insects, and the animal would in any case have no need for such a change. This contradicts the claims of evolutionists, since they maintain that organs develop in response to needs.

Furthermore, wings and feathers that did develop in living things seeking to catch insects, would become damaged when animals used them for hunting. This is another inconsistency in terms of the insect-net model.

If the forearms of a creature had evolved to catch prey, then it would need gaps in its "hands," rather like those in a flyswatter, to let the air pass through. [8] Yet bird arms possess no such gaps; they have been fully created for flight. There are no gaps even in the wings of *Archaeopteryx*, the oldest known bird and possessor of a perfect avian body. This is one of the proofs that it did not seek to hunt insects by using its wings, which totally refutes the model in question.

The "Wing-Beating" Model

This scenario maintains that the creatures seized their prey with their jaws, using their forearms as bilateral stabilizers when leaping into the air. It hypothesizes that growth in these forefeet led to a gradual increase in lifting power, thus enabling them to leap further and hunt better. Gradual improvements in the wingtips are alleged to have increased their lifting power and made possible more powerful flight.

This model's claims are equally unfounded. First, it's impossible for various changes to take place in an animal's offspring on account of movements that a parent constantly performs. For such a phenomenon did take place, these features would have to be transmitted to subsequent generations genetically. This fallacy is an extension of a claim made by the French biologist Lamarck at a time when the science of genetics was unknown, and which claim was later completely refuted. (For details see, Harun Yahya's Darwinism Refuted, New Delhi, Goodword Books Ltd. November 2002)

The general lines of scientists' criticisms of the wing-beating model run as follows:

- Well-opened wings will slow down movement by increasing air resistance.

- Beating its developing wings is no advantage for a creature that lives and hunts on the ground,

- The theory ignores the effects of gravity and is inefficient in terms of energy consumption,

- Flight at slow speeds and low elevations is more advanced and more complex than high-speed, high-altitude flight,

- Looking for prey during flight requires high maneuverability with delicate coordination. Such a sensitive control mechanism is impossible in leaping creatures with a long, stabilizing tail. [9]

These general criticisms are the first inconsistencies that spring to mind, but these theories are also invalid in numerous other ways. For example, no intermediate fossils exist to show transitional wing changes between the periods of pre-flight and active flight. In other words, there is no trace of half-winged, half-fore legged reptiles that should have leaped from bough to bough while it developed wings. (For detailed information, see, Harun Yahya's *The Transitional Form Dilemma*, Istanbul: Global Publishing.)

Evolutionists still maintain that dinosaurs turned into birds, but must find evidence for that claim from the fossil record. If dinosaurs did indeed develop into birds, then half-dinosaur, half-bird transitional creatures should have left fossils behind. For many years, evolutionists maintained that *Archaeopteryx* represented just such a transition. Yet new fossil findings have shown that *Archaeopteryx's* reptilian features have been exaggerated and that there are no grounds for regarding the creature as a *primitive* bird. (For details, refer to the chapter, "*Archaeopteryx* is an Extinct Species of Bird, Not an Intermediate Form.")

Furthermore, theories provide no explanation of the origin of feathers, or how the complex structure of birds' brain or their essential three-dimensional perceptual-control mechanism came into being.

The Historical Development—and Invalidity—of the Cursorial Theory

The cursorial theory was first advanced by Samuel Williston in 1879. Without offering any details of how it might have happened, Williston suggested that flight could evolve through a number of stages: running, jumping, leaping from on high, and gliding. In 1907 and 1923, Franz Baron Nopcsa added some detail to Williston's claim and suggested that an animal could develop wings for speed as it ran along the ground. However, there is no such case of living things using wings for greater speed, and flexed wings actually increase air resistance. [10] Furthermore, this theory does not seek to explain how wings first developed from forelegs.

Professor Alan Feduccia, of the North Carolina University Biology Department, recognized as one of the world's most eminent authorities on ornithology, describes the theory as “aerodynamic absurdity.” [11]

Some 50 years later, Yale University Professor of Geology John Ostrom proposed a new version of the cursorial theory, suggesting that forearms turned into wings as they attempted to capture insects. According to Ostrom, feathers first emerged for insulation of body heat and later extended in length. [12] This “insect theory” came in for criticism on four major grounds, and in 1983 Ostrom was forced to reject his own theory. [13] In one statement, he cites the absence of the intermediate forms his theory required:

No fossil evidence exists of any pro-avis. It is a purely hypothetical pre-bird, but one that must have existed. [14]

Those eager to continue with the theory after Ostrom suggested that feathered wings developed in order to control the body’s direction during running and leaping. Like their predecessors, however, these men too came in for criticism. [15] For instance, Professor Jeremy Rayner of University of Leeds calculated that when a living thing in this hypothesis jumped up into the air, there would be a 30 to 40% drop in its speed which would cause serious problems in flight. Rayner came to the conclusion that under such conditions, a considerable amount of energy would be required which would mean a very low flying speed. [16] Rayner therefore suggested that the model was lacking in the morphological, physiological and behavioral features required for flight, and that it would therefore fail. [17]

Despite changes brought in, the Museum of Texas Technical University paleontologist Sankar Chatterjee was forced to accept that the cursorial theory was bio-mechanically untenable. [18]

David E. Fastovsky, a professor of earth sciences and a paleontologist, and the cellular biologist and anatomist David B. Weishampel of the John Hopkins University Medical School, stated that functional morphologists have been unable to satisfactorily model the running-to-flight transition in early birds. [19]

An important fact is that no present-day bipeds use their forelimbs for balance. Kangaroos, which stand on two legs—a cursorial posture—and have short forelimbs and a long tail, put the theory to the test. They do not extend their forearms when jumping; on the contrary, their arms play a passive role. Neither do they bat or flex their arms to increase jumping speed.

In the words of the paleontologist Sankar Chatterjee, “To minimize drag force, they are kept in a folded position in a strictly sagittal plane during takeoff, midway through the leap, and during landing.”[20]

The evolutionary biologist Walter Bock also refers to the invalidity of the claims regarding the cursorial theory:

I know of no small *tetrapods* about the size of *Archaeopteryx* that are primarily terrestrial (e.g., not flying-running forms, or secondarily flightless or degenerate flying forms) and use their forelimbs for balance during fast running or during a leap. And I know of none using the forelimbs as flapping structures to provide forward thrust to increase the length of its leap. [21]

The cursorial theory poses insoluble difficulties for evolutionists. Their fundamental claim—that because certain reptiles beat their forelimbs for long periods in order to catch insects, these limbs developed into wings—contains a major inconsistency. They offer no explanation as to how a structure as complex as the wing developed to catch flies.

John Ostrom, the foremost proponent of the cursorial theory, confesses that supporters of both theories have no grounds on which to rest their case:

My cursorial predator theory is in fact speculative. But the arboreal theory is also similarly speculative. [22]

THE MYTH OF FLY-CHASING DINOSAURS

According to the cursorial theory, birds took to the air while seeking to catch flies. But in this claim, the origin of the flies is itself solely the product of imagination and lacks any scientific basis. Insects’ flight is exceptionally complex, yet faultless, and the fly—cited by evolutionists to account for flight in birds—already possesses a perfect flying ability. Human beings can’t raise and lower their arms even ten times a second, yet a fly can beat its wings an average of 500 times a second. In addition, a fly can maneuver much quicker than a fighter plane, move sideways or backward and forward to perfection and turn back on itself, even walk upside down on the ceiling. Flies also beat both their wings simultaneously. The slightest variation in wingbeat would ruin the fly's balance, yet that never happens.

Flies’ perfect structures have been researched by a great many scientists. Michael Dickinson, a California, Berkeley University professor of biology and winner of the McArthur Institute 2001 special talent award, was quoted in *The Scientist* magazine:

Insects still represent the most sophisticated aerial machine on the planet . .. they can take off backwards, fly sideways, and land upside down! Dickinson says as follows: “Flies in particular have unique specializations that lead to extraordinary.” [1]

Scientists are still engaged on research developing robots that can imitate the details of flies’ flight. First, they must determine the aerodynamic forces that act on the fly’s wing . However, due to flies’ speed, it is almost impossible to measure such rapid movements. According to Dickinson, “No computer in the world can tell us what these forces are.” [2]

At a meeting held in November 2002, Dickinson told neurologists that: [2]

Understanding insect flight requires greater research into the whole nervous system. Everything, from the mechanics of the muscles to the biomechanics of the skeleton and avian aerodynamics, is of great importance in resolving a neurological problem.[3]

For a long time, scientists sought an answer to the most fundamental question of how flies direct their flight. No one had established a direct connection between flies' visual system and the muscles controlling their wings. Using high-speed video cameras, Dickinson managed to capture fly movements and investigate the factors affecting their maneuverability. As a result of his research, he obtained evidence of how their visual system controls flies' movements and establishes timing in manoeuvrability.[4]

Michael Dickinson and his colleagues at Berkeley used a virtual reality chamber to discover how flies react to changing visual images. With images quivering at between 3000 and 4000 times a second, Dickinson discovered that flies transmit the information from their eyes to an organ known as the *halter*, which acts as the insect's gyroscope and sends impulses that alter the wings' muscles, movements and angles of approach. This system works exceedingly quickly. For example, flies can change direction by reacting to alterations in visual images in as short a time as 30 microseconds.

Dickinson sets out his conclusions in the face of this discovery:

Flies are the most accomplished fliers on the planet in terms of aerodynamics. They can do things no other animal can, like land on ceilings or inclined surfaces. And they are especially deft at takeoffs and landings—their skill far exceeds that of any other insect or bird. The halteres, beating out of sync with the forewings, are the key to the fly's aerodynamic prowess. Remove a fly's halteres, and it becomes unstable and quickly crashes to the ground. [5]

Flies' flight systems have served as models for modern-day helicopters, but are actually far superior to those helicopters. How did this immaculate system emerge so perfectly in such a tiny creature? Evolutionists give no consistent reply. Even a single fly is clear evidence of creation. The superior creation that Allah manifests in this minute insect is just one example of His infinite knowledge. The British biologist J. Robin Wootton makes this admission regarding the dilemma that the fly's superior design poses for evolutionists:

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.6

1. Laura DeFrancesco, "Learning How Flies Fly",
The Scientist, Vol. 16, No. 2, 21 January 2002, p. 27;
2. "Sinekler Nas›l Uçar?", (How do flies fly?), Hürriyet Bilim magazine, March 22, 2003.
3. http://www.the-scientist.com/
yr2002/jan/research2_020121.html
4. Laura DeFrancesco, "Learning How Flies Fly", loc. cit.,
5. http://www.berkeley.edu/news/magazine/fall_
98/discoveries_fly.html
6. J. Robin Wootton, "The Mechanical Design of Insect Wings", Scientific American, Vol. 263, November 1990, p. 120.

THE ORIGIN OF FLIGHT ACCORDING TO THE ARBOREAL THEORY, AND THE ERRORS THEREIN

After the cursorial theory had found itself in a dead-end, O. C. Marsh proposed the arboreal theory, which received the approval of the majority of evolutionists. However, as we saw in John Ostrom's admission in the preceding section, the arboreal theory, too, consists of a claim lacking any scientific foundation.

The arboreal theory first hypothesizes that a two-legged animal running on the ground adapted to life in the trees, and suggests that it used its forelimbs like parachutes in jumping from one branch to another. Again according to the theory, wing-beating flight subsequently developed and scales—which acquired an aerodynamic importance during jumps—gradually turned into feathers under the effect of chance mechanisms. *

This theory suggests that the first feathers slowed the animal down as it leaped from branch to branch. That is how these animals known as *pro-avis* (pre-birds), supposedly controlled their jumping and descent. Again according to the theory, these creatures sought their food on the ground, and used the trees for nest-building, concealment and perching. According to evolutionist assumptions, these creatures, after leaping long distances from tree to tree, gradually developed the ability to glide, maneuver and make slow descents. Once they had fully developed gliding activity, wing beating began and eventually culminated in active flight.

Without submitting any evidence, evolutionists claim that everything happened in some way in stages. Yet all this is entirely based on the imaginary claims and has no scientific foundation.

Proponents of the arboreal theory maintain that alleged primitive birds ascended to the trees to escape enemies or to build nests, that they climbed the trees with their front claws and subsequently learned to fly by gliding down to lower branches. Evolutionist critics of the theory, however, state that *Archaeopteryx's* claws were not suited to a fast-moving creature that ran along the ground, and resembled those of modern-day perching birds. [23]

David E. Fastovsky, the professor of geosciences and paleontologist, and the cellular biologist and anatomist David B. Weishampel express their criticisms of the arboreal theory:

It has been argued that perhaps the earliest birds scaled trees, and from that position learned to fly. There is however, no evidence for an arboreal proto-bird, no evidence for climbing adaptations, and no evidence in the skeleton of any nonavian theropod for arboreal habits. [24]

Interestingly, critics of this theory propose an even more inconsistent one—the cursorial theory described above. They find themselves in such a predicament by obliging themselves to offer some explanation within the evolutionary template. Those who maintain that dinosaurs' forelegs gradually grew into wings are equally critical of the theory proposed, mainly by Alan Feduccia and Larry Martin, of the "from the trees down," or arboreal theory.

The evidence shows that both sides are correct in their criticisms. Birds evolved neither from dinosaurs nor from small reptiles living in the trees. Anyone free of an evolutionist preconception can easily see the inconsistencies inherent in both claims.

Since they lack any evidence or scientific foundation, both theories are based on imaginary claims. Robert L. Carroll, the world-renowned expert on vertebrate paleontology, comments: "neither structural nor physiological arguments have yet settled this controversy conclusively."[25]

As Professor Phil Regal of Minnesota University has said, "Evolutionary theories relating to the origin of feathers and flight (and even heat conservation) are all inadequate." [26] The Pennsylvania State University biologist James H. Marden states the following about the claims regarding the origin of flight: "Theorists have spent half a century fiercely debating whether avian flight evolved from 'the trees down,' via gliding intermediates, or from 'the ground up,' via running, leaping intermediates, with no resolution in sight." [27]

Another opponent of the theory of evolution, the anatomist David Menton, said this about the origin of birds during the course of an interview:

There are really two theories—you can't test either, of course. The arboreal theory and the cursorial theory. **Each side is quite certain the other side is dead wrong, of course.** Evolutionist John Ostrom speculates that feathers evolved from large scales on the forelimbs of dinosaurs and that these long feathers, as they developed, were used to catch insects. Also, they're an incredibly complex structure to use just for this purpose. And they would blow the insect out of the way. Birds couldn't clap their limbs together in front anyway—they just don't have that kind of a shoulder. **There's no slightest evidence for either theory, and the people who take each view make that point.** There are no examples of living or fossil scales that even remotely resemble a feather. *Archaeopteryx* has complete feathers like modern birds. [28]

The proponents of both theories have made their claims without basing them on any valid foundation. The conclusion to be drawn is that evolutionists cannot account for the origin of birds at all.

When it comes to the origin of birds, one most important point that evolutionists ignore is the irreducible complexity of the wing. Wings can function only when they possess all their

perfect structures together: Structures such as a partial or deficient wing would have no function in terms of flight. In that case, the “gradual evolution” model, the major mechanism that evolution theory suggests, signifies nothing. (For details, see the section, “The Irreducible Complexity in Wings.”)

*. http://www.geology.ucdavis.edu/~cowen /HistoryofLife/feathersandflight.html

EVOLUTIONIST EFFORTS TO PRODUCE AN ALTERNATE EXPLANATION

Another evolutionist biologist, Kenneth Dial of Montana University, added a further speculative scenario to the interpretations already made. Though his claim received wide coverage in the world press in October 2001, it totally lacked any scientific foundation.

Dial’s thesis was based on some observations of partridges of the species *Alectoris chukar*. When these birds ascend a steep slope or tree trunk, they prefer to run rather than climb and, as they run, flap their wings for greater speed. This short sprinting is known as “wing-assisted incline running.”

During this process, the partridges use their wings as well as their feet, thus reducing the effect of gravity. This bird’s feet are created in such a way as to grip the ground, and its wings act rather like the ailerons on a racing car. Based on this evidence, Dial maintains that the first birds, similarly, used their wings not for flight, but to assist in running. He hypothesizes that these animals moved their forelimbs not forward and backward like reptiles, but up and down, like modern-day birds.

With this proposed concept, Dial aimed to find a compromise path between the two sides of the debate over the origin of flight, which had been going on since the 1800s: of whether dinosaurs learned to fly by running on land or by leaping from tree to tree. [29] However, this claim of his received little approbation. Luis Chappe of the Los Angeles Natural History Museum summed the matter up by saying that we could never know whether or not dinosaurs behaved like partridges:

I imagine people will continue to argue about the origin of bird flight for a long time. [30]

Dial observed that young birds were almost as talented as adults when it came to wing-assisted incline running. He established that only four days after they hatched, youngsters were able to climb 45-degree inclines in this manner, and that their still-growing wings created an aerodynamic effect. He conducted a number of experiments on these wings and saw that the aerodynamic effect declined in those wings whose developing feathers he shortened. These birds were unable to climb as well as those whose feathers had not been shortened. Tests in the laboratory showed that various other ground-dwelling birds—such as the partridge, chicken, turkey, quail and wild chicken also flapped their wings—when running up inclines and steep

surfaces. [31] However, these observations are no indication that these creatures are less developed, nor that they evolved from dinosaurs.

Dial, an evolutionist who supports the idea that birds evolved from dinosaurs, sought to place his observations of partridges running with wing assistance in the imaginary dino-bird evolution scenario. According to the scenario favored by Dial, when dinosaurs fleeing in panic from predators headed towards steep slopes, they beat their forearms to gain extra speed. Their forearms thus gradually developed into wings. But clearly, Dial's claim is nothing but a work of the imagination. Showing that shortening birds' feathers reduces aerodynamic effects provides no explanation for the flight allegedly displayed by dinosaurs.

This is a groundless claim made by a great many other evolutionists to inculcate people with the imaginary dino-bird model. Alan Feduccia says that:

Dial's work is surprisingly poor. First, the galliform birds are a very poor choice, as they are among the most highly derived flying birds, and have a huge pectoral muscle mass for burst flying from the ground. That's why hunters like them; they have a lot of good meat! They have about 35% or more of the body mass devoted to the flight apparatus, as compared to some 8% or less in *Archæopteryx* and even less in *theropods*. So, what do his findings mean? Answer. Nothing! [32]

The fact that a scientist made such a claim and that it was published in a scientific journal might lead some to imagine that tales of this sort have some scientific basis. But in fact, scientific findings clearly show Dial's claim to be no more than a fairy tale.

Furthermore, it's not only the origin of wings and flight that evolutionists need to explain. Accepting the idea that birds developed in stages also means accepting that all of birds' complex structures and systems—their one-directional lung design, their hollow bones, the microscopic hooks and barbs on their feathers and their light but flexible structure, their warm-blooded metabolism, and a great many other details revealing this magnificent creation—also came into existence in stages, which is hardly possible. In addition, it is unlikely for any demi-bird having these half-formed organs and systems to survive.

In addition, new advances in the field of technology show that flying birds and flight were specially created. Conrad Waddington, a professor in the field of animal genetics, states the illogicality of seeking to base the development of living things on chance and random natural mechanisms:

To suppose that the evolution of the wonderfully adapted biological mechanisms has depended only on a selection out of a haphazard set of variations, each produced by blind chance, is like suggesting that if we went on throwing bricks together into heaps, we should eventually be able to choose ourselves the most desirable house. [33]

The logic on which such theories are based is so shallow that all the conditions to be met for a living thing to fly are totally ignored. For arms to gradually turn into perfect wings and achieve a structure that permits total maneuverability would require a far more delicate adjustment than random mutations could ever establish —99% of which are harmful, in any case. Indeed, no scientific evidence supports such an idea.

In fact, according to natural selection—the alleged fundamental mechanism that leads to evolution—any half-developed creature could not survive while waiting for a random mutation, the work of pure chance, to complete the process. Even if such an impossibility were in some way overcome, many complementary features would have to be acquired at the same time: Each bone in a dinosaur's skeleton turning hollow, the lung acquiring a wholly different structure, muscles suited to tireless flight developing, the body assuming an aerodynamic shape, necessary connections taking place in the brain to make flight possible, and a great many other changes. It is illogical to imagine that random mutations could come together all at once, and in a seamless arrangement. It is clear that birds emerged not incrementally, by chance, but as the result of a flawless creation.

This conclusion reached by means of scientific facts repeats a truth taught in the Qur'an. Allah is He Who creates living things using no previous models. Every species in nature is an indication of the variety in His creative artistry. Allah reveals in the Qur'an:

Everyone in the heavens and Earth belongs to Him. All are submissive to Him. It is He Who originated creation and then regenerates it. That is very easy for Him. His is the most exalted designation in the heavens and the earth. He is the Almighty, the All-Wise. (Surat ar-Rum, 26-27)

IMPORTANT STRUCTURAL DIFFERENCES BETWEEN DINOSAURS AND BIRDS

According to the hypothesis currently favored by most evolutionists, birds descended from small *theropod* dinosaurs (theropod being the name generally given to carnivorous dinosaurs such as *Tyrannosaurus* rex and velociraptors). Storrs L. Olson, president of the Smithsonian Institute's Ornithology Department, refers to this claim, which evolutionists are unable to back up with any scientific evidence, as "one of the grander scientific hoaxes of our age." [34]

Any comparison of living birds and reptiles shows that these classes are very different from each other and that no evolution could have transformed the one into the other. In evolutionist publications, however, all these differences are completely ignored, or dismissed as questions that can be easily resolved.

Below is an example of accounts, aired on a well-known TV documentary station, the *Discovery Channel*, yet far divorced from any scientific validity:

The evolution of birds is still one of the most hotly debated scientific issues. It appears that the ancestors of birds were reptiles 200 million years ago. When they went into the trees, they developed a scaly layer that would become a primitive wing. These wings helped them to come down from the trees more easily. 50 million years later, *Archaeopteryx* came on the scene. It still had teeth and hard bones like a reptile, but unlike other creatures, it had feathers. Like scales, feathers are made of keratin, but they are lighter and more flexible. *Archaeopteryx* could fly.

Within the next 25 million years, it developed a greater flying ability, and every surplus gram of weight was lost. It even lost its teeth to make it lighter. Its bones had a texture like a beehive which gave them strength. About 50 million years ago, the number of mammals increased, and birds appeared that could hunt them—birds of prey were born. [35]

By resorting to such a fairy tale-like style, the *Discovery Channel* seeks to imply that a transition from reptiles to birds is perfectly reasonable. It needs to do such a thing because evolutionist claims are devoid of any scientific evidence. There are actually insuperable differences between the two living species. As you already saw, claims of avian evolution, though depicted as scientific fact, are totally lacking in evidence. No intermediate form to back them up has ever been found.

First of all, the structural differences between dinosaurs and birds is too great to be bridged by any evolutionist account. Birds' unique anatomy allows them to fly. The fossil record is unable to offer any evidence that any evolution between these two very different groups ever took place. Therefore, the theory that birds are descended from dinosaurs is rejected even by some biologists and paleontologists who subscribe to the theory of evolution.

For instance, the world-renowned ornithologist Alan Feduccia of North Carolina University and Larry Martin of The University of Kansas take the view that birds cannot have evolved from any known dinosaur group. Feduccia despite being a believer in evolution, points to the evidence fact that there are enormous differences between dinosaurs and birds and shows that the latter cannot have evolved from the former.

When the anatomies of *theropod* dinosaurs and birds are examined, it can be seen that there is no evolutionary relationship between them. Alan Feduccia sets out the impossibility of *theropods* evolving into flying creatures:

It's biophysically impossible to evolve flight from such large bipeds with foreshortened forelimbs and heavy, balancing tails. [36]

There are deep physiological gulfs between birds and dinosaurs. First of all, wings—the attribute that makes a bird a bird—represent a major dilemma for evolutionists. How did the wing's flawless structure came into existence through consecutive random mutations, as evolutionists would have us believe? The question goes unanswered. Also, evolutionists cannot explain how a reptile's forearms could have turned into a flawless wing as a result of mutations —defects arising in its genes.

In addition, wings alone are not sufficient to turn a land-dwelling animal into a bird. Land-dwellers lack many other structures and mechanisms that birds use to fly. As you've seen, birds' bones are much lighter, and their lungs and far more specialized coronary-circulation system have very different structures and functions. Their muscular and skeletal structures are different. It is impossible for these mechanisms to have accumulated gradually, as evolutionists would have us believe.

In any case, fossils reveal that no such transition ever happened. This situation, which represents such a predicament for evolutionists, was described in a *New Scientist* article entitled, "Birds Do It . . . Did Dinosaurs?"

Neither their hypothetical ancestor nor transitional forms linking it to known fossil birds have been found. [37]

For a reptile to acquire so-called avian features, according to evolutionist claims, it would have to undergo countless mutations. Just the so-called development of a reptile's front legs into wings, for example, would demand an endless procession of gradual changes. Every mutation in the genetic information regarding the forelegs must cause certain small alterations, and each one must make them a little more wing-like, not less. For example, fur must gradually appear on the limbs, then feathers must gradually appear in future generations —first the stem and then the other components. The digits must shrink with every passing generation, and the limb must increasingly come to resemble a wing. These slow, gradual changes—in the animal's lungs, its scales turning into feathers, changes in its bone structures and other characteristics— should appear in the fossil record.

But every one of these intermediate stages that evolutionists claim took place actually represents a disadvantage. Since these structures are not fully formed or fully functional, these

transitional species will be unable to survive. Right away this conflicts with the "survival of the fittest" claims of evolutionists; their theory thus refutes itself.

As you can clearly see, any evolution from reptiles to birds should have left millions of intermediate forms to demonstrate the fact. Yet to date, not a single half-reptile, half-bird fossil has ever been found. The existing fossils provide no evidence for evolution, but belong to extinct birds or extinct reptiles—proof of creation. The dino-bird stories we so often encounter in the media are mere fairy tales, as you shall soon see. None of these provide the so-called missing link in the evolution of birds.

Gordon Rattray Taylor, himself an evolutionist, describes the theory's inability to account for the birds' origin:

. . . the number of modifications in reptilian structure which the birds have managed to effect in order to adapt themselves for flight is so large as to constitute a real problem and deserves our further attention. To begin with, many modifications serve to reduce its weight. The bones are hollow, the skull very thin. It has abandoned the heavy tooth-studded jaw for the light but rigid beak. The body is condensed into a compact shape, the reptilian tail being abandoned, as also the reptilian snout. The centre of gravity has been lowered by placing the chief muscles beneath the main structure. Where organs are paired, like the kidney, and the ovary, one has been sacrificed. The pelvis has been strengthened to absorb (allow me the teleology) the shock of landing. The legs and feet have been reduced to a minimum; the muscles operating them have vanished, to be replaced by muscles within the body. The brain has been modified: a larger cerebellum to handle problems of balance and co-ordination, a larger visual cortex now that vision has become more important than smell. Less obvious but even more remarkable is the change in bodily metabolism.

To produce the energy for flight, the bird must consume a lot of fuel and maintain a high [body] temperature. Not only do birds eat a lot, as anyone who grows fruit or has seen the bullfinches systematically remove every bud from a treasured shrub knows, but they have a crop in which they can store fuel. So that it can handle more blood, the partitions in the heart have been completed. The lungs too have not only been enlarged but are supplemented by air-spaces within the body. In land creatures like ourselves, much of the air in the lungs remains static; we exchange only a very small proportion of it in a normal breath. The bird, by passing the inspired air right through the lung into the air-sacs, contrives to exchange the lot with each breath. This system also serves to dissipate the heat generated by the muscles during flight.

It strains the imagination to visualise so many beautifully apt changes occurring by chance, even when one considers that 150 million years elapsed between the emergence of life from the sea and the appearance of the first birds. For my part, I can imagine that each change might have occurred by chance during that time. What I find hard to swallow is the accumulation of different changes integrated into a single functional pattern. [38]

Gordon Taylor is stating why avian evolution is an impossibility; yet a great many evolutionists still persist in believing in it. The reason for this lies in their philosophical prejudices. In order to deny Allah's creation, evolutionists display a blind devotion to their

claims. Despite the lack of any evidence to support their claims—and even though those claims have been demolished countless times—still they refuse to accept the fact of creation.

For anyone pondering over the subject without prejudice, the conclusion to which science leads is *creation*. At the same time, this fact is revealed in the Qur'an. The Qur'an states that **"Among His Signs is the creation of the heavens and Earth and all the creatures He has spread about in them …"** (Surat ash-Shura, 29) and **"And in your creation and all the creatures, He has spread about there are Signs for people with certainty."** (Surat al-Jathiyya, 4).

In other verses Allah refers to the variety of life:

Have they not seen how We created for them, by Our own handiwork, livestock which are under their control? We have made them tame for them and some they ride and some they eat. And they have other uses for them, and milk to drink. So will they not be thankful? They have taken gods besides Allah so that perhaps they may be helped. They cannot help them, even though they are an army mobilized in their support. (Surah Ya Sin, 71-75)

AVIAN BONE STRUCTURE CREATED ESPECIALLY FOR FLIGHT

Of the many structural differences between birds and reptiles, from the point of view of flight, one of the most important is bone structure. Reptile bones are heavy, thick and solid. But birds' bones must be both strong and light—very thin and hollow, but still strong despite that. Light, fine bones make it easier for birds to fly, reducing air resistance to a minimum and reducing the amount of energy needed to take off and remain aloft.

Although hollow, bird bones are very strong in terms of the power possessed by birds. For example, the beak of the hawfinch, a bird only 18 centimeters (7-inches) long, can apply 68.5 kilograms (151 pounds) of pressure to break an olive pit. In contrast to those of terrestrial animals, the avian skeleton fuses together the shoulder, hip and breast bones. This lends the bird further solidity. Additionally, this structure reduces the amount of sinews and tendons to hold the skeleton together, making the bird even lighter.

As stated earlier, the avian skeleton is lighter than that of all other vertebrates. A pigeon's skeleton, for instance, represents only 4.4% of the bird's total body weight. A frigate bird's bones weigh 118 grams (0.260 pounds less than the total weight of its feathers!)

Henry Gee, editor of the scientific magazine *Nature*, reports this characteristic of birds:

Their breastbones are large, serving as anchors for powerful muscles; their collarbones are united to form a flexible spring brace . . . Their backbones are tight, interlocked, and stiff, the interlocking ribs contributing to a rigid cage, and yet many of the bones are hollow:

lightweight yet strong, like tubular steel. Their pelvis and sacrum are welded together into a solid structure. Overall, the body of birds combines lightness with strength. [39]

This anatomy, unique to birds, is completely different from that of reptiles. Nonetheless, the evolutionary scenario of dinosaur to bird is still blindly defended, though based on no concrete evidence at all. (We shall look at detailed instances in due course.)

Certain concepts, being misunderstood, are imagined to represent evidence for the theory. Based on the differences in dinosaur pelvic bones, for example, some evolutionist publications suggest that birds evolved from dinosaurs. These differences lie between dinosaurs belonging to the *Saurischian* (lizard-hipped) and *Ornithischian* (bird-hipped) groups. From time to time, the existence of dinosaurs with bird-like hip bones is perceived as evidence for the claim of dino-bird evolution. Yet the hip bone similarity provides no support for dinosaurs being the ancestors of birds. Dinosaurs belonging to the *Ornithischian* group bear no similarity to birds at all with regard to their other features.

Ankylosaurus for example, had short legs, a giant torso and armor-like scaly skin, and is even compared to a battle tank. Yet it is a member of the *Ornithischian* family, with bird-like hip bones. On the other hand, some anatomical features of *Strithiomimus* can be compared to those of birds. It was long legged and had short front legs, but is actually a member of the *Saurischian* family of dinosaurs, with reptile-like hip bones. [40]

In short, hip bone structure constitutes no evidence of any relationship between dinosaurs and birds, as evolutionists claim. The name "bird-hipped dinosaur" stems from mere resemblance, but the other enormous differences between the two groups make it impossible to view this similarity from an evolutionary perspective.

Many other problems are attendant upon the theory asserting that birds evolved from dinosaurs. Compared with *Archaeopteryx*, regarded as the oldest known bird, the forearms of *theropod* dinosaurs are very short in relation to their bodies. Bearing in mind these creatures' large body weights, you can see that their arms cannot have developed into any kind of proto-wing.

The great majority of *theropod* dinosaurs lack the semilunate carpal or wrist bone found in birds, but possess other wrist components the like of which are absent in Archaeopteryx. There is also very strong evidence in dinosaurs' forelegs that they cannot be the ancestors of birds. A team led by Alan Feduccia examined bird embryos under the microscope and published its results in *Science* magazine: [41]

New research shows that birds lack the embryonic thumb dinosaurs had, suggesting that it is **"almost impossible"** for the species to be closely related. [42]

As with their structure and shape, the arrangement of bones in a reptile's body is also completely different from that in birds. It is quite impossible that a dinosaur's skeleton gradually transformed into an avian one suited to independent flight. First of all, the bones in both groups, dinosaurs and birds, are located where they are for a specific purpose. Their shapes too have been created according to need. Skull size, number of vertebrae, leg length, foldable wing bones, the breastbone necessary for flight—have all been created in line with birds'

lifestyles. If there had been stage-by-stage mutations, as evolutionists claim, then we should come across a great many deformed skeletons. For example, in birds, one wing might be more developed than the other, or one arm might have been long and the other short. Balance might have been impaired by a large head on a small body, or toes pointing in the wrong direction might have been impaired its balance. Vertebrae might not have developed in the neck region, or might have been shaped in such a way as to put pressure on the nerves. The possibilities are endless. If a living thing's bones had developed by chance, then a great many such deficient or deformed anatomy should result.

Yet the layers of the Earth contain only flawless, regular fossils. This very absence of intermediate forms heads the list of subjects that evolutionists are reluctant to face. This clearly shows that living things did not evolve from one another, but were all created separately, each with their own unique structure.

The theory of reptiles evolving into birds will go down in history as an example of the magnitude of the errors that Darwinism can lead to. Alan Feduccia, for instance, says:

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.** [43]

Larry Martin, an expert in the anatomy of archaic birds at the University of Kansas, says:

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. [44]

THE UNIQUE CREATION IN THE AVIAN LUNG

Another instance that invalidates the claim that birds evolved from reptiles is the unique creation of birds' lungs. The respiratory systems of terrestrial vertebrates and of birds work in completely different ways. Birds have a greater oxygen requirement than terrestrial animals and must transmit oxygen to their cells much faster. A terrestrial lung cannot, therefore, provide the level of oxygen that birds need. In fact, avian lungs have been specially created to supply the oxygen required for flight.

The lungs of vertebrate terrestrials have a two-directional structure. During inhalation, air proceeds down ever-branching passageways and ends up at tiny air sacs known as *alveoli*, where oxygen and carbon dioxide are exchanged. The CO2-laden air later returns by the same route, being expelled via the main bronchial tube.

But in a bird's lung, air always follows a *one-way* route. The lung's entrance and exit channels are different from one another, and the air always flows in one direction. The bird thus has uninterrupted access to the oxygen in the air.

Evolutionist author Henry Gee, editor of the international scientific journal *Nature*, says, "Birds have a remarkable breathing arrangement, in which the lungs form just one part of a

one-way air handling system that incorporates large air spaces elsewhere in the body and even within the hollowed bones." [45]

When the bird breathes, air flows from the windpipe both to the lung and to the rear air sacs. The air already present in the lung moves to the front air sac. When the bird exhales, clean air in the rear air sac flows to the lung and leaves the body via the front air sac. Both cycles, in inhalation and exhalation, must occur for every breath the bird takes. Instead of the alveoli in mammals' lungs, millions of tiny tubes extend all the way along the bird lung. This complex system of air sacs ensures that the air in the bird lung constantly flows in one direction, from back to front. Thus the direction of air flow is different from that in lizards or mammals, where air retraces its route during exhalation. The fact that air always flows in a single direction in birds allows them to use the air's oxygen more efficiently.

This efficient respiratory system unique to birds reduces the amount of energy they require to take off and remain aloft. Well-developed breast muscles, attached to the furcula bone—one of the structures essential to flight—add power to each wingbeat. The long wing feathers generate the necessary lift.

Birds have no diaphragm, and therefore make use of pressure differences in the air sacs within their bones to move the air in their lungs. Most birds have eight air sacs, functioning just like bellows to move air along their respiratory canal. Many air sacs extend into bones known as *pneumatic bones.* [46](*Pneumatic* means "working under pressure.") Thanks to this unique creation, birds' lungs remain always inflated, unlike those of mammals and reptiles, always providing them with fresh air. [47]

This system in the avian lung structure is perfect for meeting high-energy requirements. Michael Denton, molecular biologist in the University of Otago in New Zealand says of this unique system:

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. [48]

The single-directional air canal is a unique structure, found only in birds. It is impossible for such a complex structure to have arisen in stages. The single-direction air canal system and lungs must both exist in completed form if the bird is to survive. Any living thing whose lungs do not function perfectly cannot live very long.

Michael Denton sets out the impossibility of an evolutionary explanation for the origin of the bird lung:

Just how such an utterly different respiratory system **could have evolved gradually from the standard vertebrate design is fantastically difficult to 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 co-adapted 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. [49]

In short, none of the alleged intermediate stages between the two types of lung are suited to a creature's survival. Since any lungs whose structural anatomy remained incomplete could not function at all, such a possibility is out of question. No living species has the time to wait for the changes necessary for such a transition to take place. Unless a bird possesses one type of lung or the other in full working order, it will die.

This fact is sufficient to show that this plumonary anatomy, unique to birds, cannot have emerged through chance mechanisms such as natural selection. The avian lung is just one of the countless proofs that living things were created by Allah.

According to Michael Denton, lungs remaining functional throughout the passage, via minute changes, from the reptile version to the avian version, with the animals enjoying an advantage at every step is no more than a work of the imagination. Indeed, according to evolutionist claims, the transition from the reptile to the bird lung must have begun with a weak quadruped whose diaphragm was incomplete, and natural selection should have eliminated such a creature.

In an interview, Denton stated that such a passage cannot have taken place and criticizes the claims made by Darwinism in terms of the avian lung:

Well, the basic pattern it fails to explain is the apparent uniqueness and isolation of major types of organisms. My fundamental problem with the theory is **that there are so many highly complicated organs, systems and structures, from the nature of the lung of a bird, to the eye of the rock lobster, for which I cannot conceive of how these things have come about in terms of a gradual accumulation of random changes.**

It strikes me as being a flagrant denial of common sense to swallow that all these things were built up by accumulative small random changes. This is simply a nonsensical claim, especially for the great majority of cases, where nobody can think of any credible explanation of how it came about. And this is a very profound question which everybody skirts, everybody brushes over, everybody tries to sweep under the carpet.

The fact is that the majority of these complex adaptations in nature cannot be adequately explained by a series of intermediate forms. And this is a fundamental problem. Common sense tells me there must be something wrong. [50]

As his statements show, there can be no question of an evolutionary link between the two-directional reptile lung and the one-directional bird lung. It's impossible to establish any transitional model between these two pulmonary structures. A terrestrial animal must constantly breathe to survive, and any radical change to its lungs will inevitably end in death in a matter of minutes. Yet according to evolution, this change must have occurred over millions of years

Another point is that reptiles have a diaphragm-based respiratory system, whereas birds do not. These different structures again repudiate claims of the one type evolving into the other.

John Ruben, an authority on respiratory physiology, comments:

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. [51]

Another feature that challenges the evolution of the avian lung is its special structure which, when deprived of air, faces the danger of collapsing. Michael Denton explains:

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 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. [52]

Avian lung canals are so narrow that the air sacs cannot be inflated and deflated like those in other vertebrates. If a bird’s lung ever deflates, the bird will be unable to draw air into it again, or will experience enormous difficulty in doing so. The air sacs in the lung therefore ensure a constant flow of oxygen and protect the lung against deflation.

Of course this system—totally different from the lungs of reptiles and other vertebrates, and based on the most sensitive balances—cannot have developed in stages through random mutations, as the theory of evolution claims. Denton states that this structure of the avian lung 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.” [53]

When we look at the bird lung, we see that it cannot have come into being through a number of small changes. This means that Darwin’s theory, in his own words, *will absolutely break down.*

John Ruben, an expert in evolutionary respiratory physiology at Oregon State University, has this to say:

Recently, conventional wisdom has held that birds are direct descendants of *theropod* dinosaurs. However the apparently steadfast maintenance of hepatic-piston diaphragmatic lung

ventilation in *theropods* throughout the Mesozoic poses fundamental problems for such a relationship. The earliest stages in the derivation of the avian abdominal air sac system from a diaphragmatic-ventilating ancestor would have necessitated selection for a diaphragmatic hernia [or hole] in taxa transitional between theropod 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. [54]

In short, any direct transition from the reptile lung to the bird lung is impossible. This important scientific evidence demonstrates the groundlessness of the "avian evolution" thesis and shows that our Almighty Lord created birds together with their unique physical designs.

Evolutionists Ignore The Evidence Against Their Theory

Most evolutionist scientists still believe that birds evolved from dinosaurs. One consequence of this widespread view is that they ignore all the evidence to the contrary.

One example of this is the research by respiratory physiology expert John Ruben at the Oregon State University in Corvallis. A group under Ruben's leadership examined the fossil design of the internal organs of *Sinosauropteryx*, a small, 120-million-year-old carnivore, and found that *theropods* resembled crocodiles rather than birds. Says Ruben:

I realized that here was the first evidence in the soft tissue that *theropods* had the same kind of compartmentalization of lungs, liver, and intestines that you would find in a crocodile—and not in a bird. [1]

Theropods have two main cavities: the chest cavity including the lung, liver and heart; and the abdominal cavity containing the other organs. As in the crocodile, these are completely separated from one another by the diaphragm. In birds, there is no such separation. The function of this division in crocodiles is to prevent air leaking between the cavities. When the diaphragm muscles contract, they retract the liver and equalize air pressure in the chest cavity by allowing the bellow-type lungs to fill with air.

Birds have no need of such a divider between the two cavities, because with the expansion and contraction of their air sacs, the air drawn into their bodies flows in a single direction down millions of tiny air channels.

At the same time, Ruben also showed that *theropods* and crocodiles possessed different hip structures, attached to muscles and which helped the bellow-type lungs fill with air. As a result of these findings, Ruben states:

It's pretty solid evidence that *theropods* could not have had a modern, high-performance avian-style lung . . . and were stuck with an unmodified, bellows like lung. [2]

In an interview, Ruben stated that the pulmonary system in birds could not have evolved from dinosaurs' lungs.

In another possible similarity with crocodiles, scientists found evidence in the infant dinosaur of a specialized breathing device called a hepatic piston. [3]

In this way, Ruben and his team once again showed that bellow-type lungs could not have evolved into the high-performance lungs in birds.[4] An article published in *Science* magazine, "Lung Fossils Suggest Dinos Breathed in Cold Blood," refers to his research:

Ruben and his graduate students sectioned crocodiles and other reptiles and found that their lung structures resembled the images of several flattened fossil dinosaurs from China. Ruben uses this lung evidence to argue not only that dinosaurs were incapable of the high rates of gas exchange needed for warm-bloodedness, but also that their bellows-like lungs could not have evolved into the high-performance lungs of modern birds. Thus, he challenges two of the reigning hypotheses concerning dinosaurs: that they were warm-blooded and that they gave rise to birds. . . But while many dinosaur experts say they welcome Ruben's novel approach, few are willing to embrace his conclusions so far.[5]

In the view of some, Ruben's report is a "one-two punch to the dinosaur origins of birds hypothesis."[6] It is striking however, that the proponents of dinosaurs evolving into birds do not include this evidence against their theory in their calculations. Supporters of the dino-bird thesis cannot offer any consistent explanation of how the rather complex avian lung, different from that in all other living vertebrates, came into be. They close their eyes to any contradictory evidence.

In addition, Ruben examined under ultraviolet light the species *Scypionyx samniticus,* a small carnivore whose organs are among some of the best preserved among known dinosaurs...The arrangement of certain internal organs of this species, was revealed thanks to this ultraviolet light. The main outlines of the animal's intestines, liver, windpipe (trachea) and muscles were determined. Although the fossil is two-dimensional, Ruben says:

Nothing is displaced . . . all [organs] are preserved in relation to each other.[7]

In this creature, a muscle that extends from the pubis to the liver helps the liver to move backwards and forwards like a piston, thus enabling the lung in modern-day crocodiles to expand and contract. The diaphragm, a layer of tissue impermeable to air, separates the liver and lungs. According to Ruben, the existence in dinosaurs of this structure known as the *hepatic piston diaphragm* totally eliminates the possibility that they once breathed by the same means as used in the avian lung. Ruben and his colleagues concluded that the arrangement of the internal organs in dinosaurs in no way resembled that in birds, and that these creatures were cold-blooded.[8]

The Kansas University paleontologist Larry Martin, who reviewed Ruben and his team's research, states:

There's actually no way they could be wrong about this. The *Scipionyx* specimen has the best preservation ever seen. It's one of the biggest discoveries of this decade. It tells us more about dinosaurs than any other specimen. . . The positions of the dinosaur's windpipe and colon serve as independent checks that the animal did not have a bird's breathing apparatus. [9]

Coming out to oppose the view that birds are descended from dinosaurs, Larry Martin summarizes the issue:

Support for the hot-blooded dinosaur hypothesis now has the rigidity of a marshmallow.[10]

According to Peter Dodson, a paleontologist from Pennsylvania University in Philadelphia, Ruben's analysis is;

Another nail in the coffin of the warm-blooded dinosaur theory.[11]

Ruben also emphasizes that the absence of the bird-type lung in dinosaurs casts a shadow over the idea that birds are descended from them.

Interestingly, however, the findings from all this research were not welcomed, because they clashed with the theory of evolution. In the same way that evolutionists offer no evidence to the contrary, they ignore criticism and seek to keep their theory alive through high-profile, sensational media reports and methods of suggestion. This reveals the dogmatism of the evolutionist perspective and their biased interpretation of fossils.

1. Ann Gibbons, "Lung Fossils Suggest Dinos Breathed in Cold Blood," Science, Vol. 278, No. 5341, 14 November 1997, pp. 1229-1230.
2. Ibid.
3. Malcolm W. Browne, "Turning Dinosaur Theory on its Paleobiological Tail," The New York Times, 26 January 1999, Science Desk.
4. Ann Gibbons, op. cit.
5. Ibid.
6. Ibid.
7. "Turbocharged dinosaur," BBC News, 21 January 1999; http://news.bbc.co.uk/2/hi/science/nature/259902.stm
8. John A. Ruben, Cristiano Dal Sasso, Nicholas R. Geist, Willem J. Hillenius, Terry D. Jones, Marco Signore, "Pulmonary Function and Metabolic Physiology of Theropod Dinosaurs," Science, 22 January 1999, pp. 514-516.
9. Malcolm W. Browne, The New York Times, 26 January 1999.
10. Ann Gibbons, op. cit., pp. 1229-1230.
11. Ibid.

The Peacock is an Example of Allah's Matchless Creative Artistry

Stuart Burgess, an assistant professor of engineering design at Bristol University in England, revealed the extraordinary nature of the peacock feather in a most striking way and concluded that this structure could not be explained in terms of Darwin's theory of "sexual selection."

With its large tail feathers with their vivid hues and unique patterns, the peacock possesses an extraordinary beauty. One feature of these stunning iridescent colors is that they change according to the angle one views them from. These are created not thanks to pigments (the substance that gives color to feathers), but to an optical effect in the micro-hairs known as the "thin film."

The thin film effect that appears in the micro-hairs—the smallest structures in bird feathers that can be seen only under a microscope—takes place in three keratin layers.

The transparent keratin layers refract light, while retaining some components of that light. The fact that the soft inner part is brown prevents light passing through and disappearing by providing a dark background. The reflected light can thus give rise to colors. The thin film effect takes place in the three layers at the same time, producing different shades. It is possible for the keratin layers to produce a specific color only thanks to their being very thin, just 1/20,000 of a millimeter (0.000,001,969 of an inch), the ideal thickness for production of the most bright colors. The thickness of each layer must not exceed the wavelength of visible light. The extraordinary vividness of the eye patterns in the peacock's tail stems from this unique color-production mechanism.1

The eye shape at the end of each feather emerges through a combination of thousands of micro-hairs. Although they are independent of one another, thousands of neighboring micro-hairs produce this pattern. Were they arranged at random and in an unordered manner, they could not produce the geometric shapes based on mathematical formulae not detailed here. The odds of this shape arising by chance are as slim as that of the flowers in a garden combining to produce the same pattern.

During courtship, an adult male peacock produces a magnificent fan as it displays its tail feathers. An adult peacock’s approximately 200 tail feathers are replaced each year. Around 170 of these are the ones forming the pattern of an eye, while the rest form a T shape. At the microscopic level, the T and eye feathers can be seen to have a very complex structure. Each of the eyes can be seen, because the short feathers have been located toward the front of the tail and the longer feathers at the back.

One reason why the feathery display appears so attractive is that they constitute a semi-circular fan with an angle greater than 180 degrees. This fan is very regular, since every feather’s axis emerges from a common geometric centre. The angles with which the feathers exit the center is also specific.

That the information determining all the structures in the feathers is concealed in DNA once again emphasizes the extraordinary nature of creation. The number and thickness of the keratin layers, the number of micro-hairs, the brown background, the distance between the feathers—all these factors are produced according to data in the DNA. This peerless beauty cannot possibly have emerged through random mutations, as evolutionists would have us believe.

Right from the outset, this fact has represented a major predicament for the theory of evolution. Darwin, who endeavored to account for the signs of creation in living things in terms of blind coincidence, made the following confession regarding peacock feathers in a letter he wrote to his friend Asa Gray on 3 April, 1860:

The sight of a feather in a peacock’s tail, whenever I gaze at it, makes me sick! 2

This certainly demonstrates Darwin’s biased point of view.

The beauty in the peacock tail has nothing to do with its function. This attribute of the peacock is a clear indication of creation. When one sees beauty in a human design, one immediately realizes that it must have a designer. For example, in addition to imparting order and functionality to a garden, a landscape architect also brings to it beauty and attractiveness—clear signs that this garden was the work of a designer. Every detail the architect adds to its beauty is further proof that the garden has not been arranged at random.

The beauty in peacock feathers, which display all the fine detail of optical science, are examples of aesthetic marvels that reveal the existence of their Creator, Our Lord.

Every detail in the peacock feather, which we have reviewed here only in broadest terms, has the appropriate location, shape, color and structure for a specific purpose. That purpose displays to us Allah's artistry, introduces us to His knowledge in the details and that Allah possesses all the power necessary to create matchless beauties that delight human beings.

In one verse of the Qur'an, people who fear Allah and who are able to comprehend such concepts by drawing attention to the beauty in living things are described as "possessing knowledge":

And humanity and beasts and livestock are likewise of varying colors. Only those of His servants with knowledge have fear of Allah. Allah is Almighty, Ever-Forgiving. (Surah Fatir, 28)

1. Stuart Burgess, "The beauty of the peacock tail and the problems with the theory of sexual selection," The In-Depth Journal of Creation, Vol. 15, No. 2, 2001, pp. 94-102.
2. Francis Darwin, Letter to Asa Gray, 3 April 1860, The Life and Letters of Charles Darwin, London: John Murray, Vol. 2, 1887, p. 296.

THE IMPOSSIBILITY OF REPTILES' SCALES TURNING INTO BIRD FEATHERS

The origin of birds has always represented a major difficulty for Darwinism. Even today, there is still no unanimity on the subject among evolutionists. One of the dilemmas facing them in this regard is the origin of birds' feathers, which possess a complex structure essential for flight, and which is present only in birds.

Many evolutionists maintain that over millions of years, dinosaur scales gradually developed into feathers by means of mutations and natural selection. However, no evidence indicates any such transition from scales to feathers, which is physiologically and anatomically impossible. Aware of this, evolutionists gloss over the matter with superficial explanations. In one of his books, the atheist and evolutionist Richard Dawkins makes do with a crude explanation consisting of single sentence: "Feathers are modified reptilian scales." [55]

Let us now look at the impossibility of these claims in detail.

Reptile scales and bird feathers are very different structures:

It's perfectly logical that evolutionists cannot supply any reasonable explanation of the origin of feathers, because reptile scales and bird feathers are entirely different structures. A. H. Brush, a professor of physiology and neurobiology from the University of Connecticut, sets out the structural difference between the two:

At the morphological level, feathers are traditionally considered homologous with reptilian scales. However, in development, morphogenesis, gene structure, protein shape and sequence, and filament formation and structure, feathers are different. [56]

Scales are folds in the skin, consisting of flat, horn-like layers. Overlapping one another like roofing tiles, they serve to keep water off, permit the animal's skin to move easily and conserve moisture and body heat. Feathers, on the other hand, are light, strong and aerodynamic forms—highly complex structures unique to birds. They consist of a central stalk, from which sprout hairs lined with microscopic barbs, barbules, and hooks. The barbs are bound together at their edges with tiny hooks, attached in such a way as to keep the feather surface flat, powerful and flexible. At the same time, this structure makes the feather impermeable to water, and thanks to the hooks, every hair is attached to its neighbor as if with a zipper.

A crane's feather, for example, has some 650 tiny barbs extending along both sides of the main stem. In each one of these, there are 600 contraposed micro-hairs, attached to one another with 390 tiny hooks. The hooks bind them together, rather like the teeth of a zipper. If these are broken apart for any reason, the bird can simply shake itself or preen itself with its beak for them to resume their previous continuous plane.

The ornithologist Alan Feduccia describes this special structure:

They are lightweight, strong, aerodynamically shaped, and have an intricate structure of barbs and hooks. This structure makes them waterproof, and a quick preen with the beak with the bill will cause flattened feathers to snap into fully aerodynamic shape again. [57]

The belief that feathers' complex structure evolved from reptiles' scales by means of random mutations is nothing more than dogma. Ernst Mayr, one of the founders of neo-Darwinism, made the following admission many 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'' feather) could be improved by random mutations. [58]

Bird feathers and reptile scales develop very differently:

Feathers do not differ from scales only in structural terms, but in their developmental paths also. Feather development is an exceedingly complex process. In contrast to scales, feathers grow out of tiny sacs called *follicles*, just like hairs do. Yet a hair has a much simpler structure than that of a feather. The growing feather is protected by a sheath and forms around a cone-shaped nucleus. The cells that will constitute the feather also develop through highly

complex physiological processes. Once the cells have formed, they migrate away from one another so as to form the complex sequences in the hooks and barbs at the feather's edge. [59]

Moreover, scales and feathers each grow out of different epidermal (skin) layers. Feathers, with their basically protein structure, are made of *keratin*, a strong, hard substance that forms when old cells in the subdermal layers die and are replaced by younger cells. However, feather proteins (b-keratins) are biochemically different from skin and scale proteins (a-keratins).

From these differences, A. H. Brush concludes that:

At the morphological level, feathers are traditionally considered homologous with reptilian scales. However, in development, morphogenesis, gene structure, protein shape and sequence, and filament formation and structure, feathers are different. [60]

An interview by Dr. Carl Wieland with Dr. David Menton of the Washington University Medical Faculty covered the impossibility of reptile scales evolving into bird feathers:

Dr. Carl Wieland: . . . Of course, evolutionists have long argued that feathers evolved from reptile scales and are thus fundamentally the same structure—very similar.

Dr. David Menton: Yes, so I became interested in comparing them myself. I had a laboratory technician at the time who had a pet boa constrictor, so I took a look at some of its scales from shed skin. I was amused that they were, of course, not even the slightest bit similar to feathers, as these photographs show. The only similarity is that they are both made of the protein keratin—like hair, nails and our skin. It's quite different. The most fundamental difference is that the feather grows out of a follicle, a tubular down-growth of the epidermis that protrudes deeply into the skin, all the way down to underlying bone in the case of primary feathers. And this tube of specialized living skin produces the feather inside of itself from a growth matrix at the very bottom.

The reptilian scale has absolutely nothing to do with follicles. All of the scales can shed as a sheet because they're nothing but folds in the epidermis, like fabric folded over on itself, whereas feathers would have to come out of their own follicle. So, if evolutionists really wanted to make a case, they could argue that feathers evolved from hair, or vice versa.

Now, of course, that wouldn't fit the evolutionary belief that mammals and birds evolved independently from reptiles. [61]

No matter how they may combine, it is impossible for unconscious cells to know how to adopt an order to enable a bird to fly. No one with common sense could ever accept that chance mechanisms—natural selection and mutation—could design the feather's structure, so ideally suited to flight. With their organs and systems created for them by our Almighty Lord, living things possess various perfections, reflecting proof of our Lord's infinite reason and knowledge.

In one verse Allah reveals:

What is in the heavens and in the Earth belongs to Allah. Allah encompasses all things. (Surat an-Nisa', 126)

There is not a single trace of the intermediate forms that

evolutionists claim should frequently be encountered:

In suggesting that feathers evolved from scales, evolutionists cannot point to any intermediate form in the fossil record that indicates feathers' stage-by-stage development. Yet there are fundamental morphological differences between the two, meaning there should be a great many such intermediate forms. Yet in the fossil record, reptile scales, bird feathers, skin and mammal fur all appear perfectly formed. Not a single fossil exists pointing to a transition to the avian feather, as is admitted in *Nature* magazine, an evolutionist publication:

Feathers are complex structures. Their abrupt appearance in the bird fossil record has been difficult to explain, mainly **because no intermediate structures are preserved in the related theropod taxa.** [62]

Some forty-five years ago, the evolutionist W. E. Swinton referred to the lack of evidence in the chapter titled "The Origin of Birds" in his book *Biology and Comparative Physiology of Birds:*

The [evolutionary] origin of birds is largely a matter of deduction. **There is no fossil evidence** of the stages through which the remarkable change from reptile to bird was achieved. [63]

The situation remains exactly the same today. This is made clear by the statement by an evolutionary biologist from Columbia University: ". . . we lack completely fossils of all intermediate stages between reptilian scales and the most primitive feather." [64]

The evolutionist paleontologist Barbara J. Stahl makes this confession:

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.**[65]

In another statement, she refers to the intermediate-form impasse:

No fossil structure transitional between scale and feather is known. . . and recent investigators are unwilling to found a theory on pure speculation.[66]

Some evolutionists seek to gloss over the matter by saying that since birds have hollow bones, they left no fossils behind. That, however, is very definitely untrue. Under certain conditions—for example, around lakes, in watery inland regions and those close to the sea—very good bird and feather fossils are frequently discovered. Thousands of fossil birds have been discovered to date, and all possess perfectly formed feather structures. Just as there are no half-scale, half-feather in the fossil record, no structure resembling a feather less developed than present-day specimens has ever been found.

In an *American Zoology* article, Larry Martin and S. A. Czerkas write, "The oldest known feathers . . . are already modern in form and microscopic detail."[67]

The anatomist David Mention also touches on the subject:

There are no examples of living or fossil scales that even remotely resemble a feather. *Archaeopteryx* has complete feathers like modern birds.[68]

Specimens of *Archaeopteryx*, the oldest known bird, have been perfectly preserved. An analysis of its 150-million-year-old feathers has revealed that every detail is identical to present-day specimens. [69] Back in 1910, the zoologist W. P. Pycraft stated that the *Archaeopteryx* feather was no different from fully developed modern feathers.[70] Other *Archaeopteryx* fossils discovered since that time have in no way altered that fact. There are many well-preserved feathers in amber dating back to the late Mesozoic Period (251 to 65 million years ago). In addition, analysis of the many modern discoveries of dinosaur skin has revealed that "The skin of a wide variety of dinosaurs . . . is unlikely to represent a predecessor to a feather-bearing integument." [71]

In their *Scientific American* article, "Which Came First, the Feather or the Bird?" Richard O. Prum and Alan H. Bush wrote:

Progress in solving the particularly puzzling origin of feathers **has also been hampered by what now appear to be false leads, such as the assumption that the primitive feather evolved by elongation and division of the reptilian scale, and speculations that feathers evolved for a specific function, such as flight. A lack of primitive fossil feathers hindered progress as well.** For may years, the earliest bird fossil has been *Archæopteryx lithografica*, which lived in the Late Jurassic period (about 148 million years ago). But *Archaeopteryx* offers no new insights on how feathers evolved, because its own feathers are nearly indistinguishable from those of today's birds. [72]

Evolutionists' biased attitudes towards the question of the origin of bird feathers led to conflicting theories. [73] It was claimed that reptile scale gradually lengthened, developed fringes, and assumed a form capable of bearing a bird in such a way as to facilitate flight. [74] It's of course impossible for an unconscious scale to decide to lengthen itself and then change form so as to achieve the structure of the avian feather. It's even more impossible for all the scales on a reptile's body to make such a decision and give rise to a marvel of creation that astounds scientists. Indeed, evolutionists have no evidence to support their scenarios, which are simply based on imagination.

The fossil record refutes feathered dinosaur claims:

To date, there has been speculation regarding "feathered dinosaurs," although detailed analysis has refuted all of it. In an article titled, "Why Dinosaurs Lacked Feathers," the eminent ornithologist Alan Feduccia writes:

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. [75]

All the fossils proposed as representing feathered dinosaurs over the last ten years are in fact debatable. Detailed examination has shown that the structures portrayed as feathers are actually collagen fibers (protein connective tissue) from under the skin. [76] Alan Brush, an expert

on bird feathers from Connecticut University, has indicated that these lack many of the structures found in modern bird feathers. [77]

Speculation regarding the remains in question stems from evolutionist prejudice. As Alan Feduccia says, “Many dinosaurs have been portrayed with a coating of aerodynamic contour feathers with absolutely no documentation.” [78] However, it has emerged that the specimens sometimes depicted as feathered dinosaurs were not really such, and that such inference resulted from biased interpretation. (For detail, see the sections “The False Fossil *Archaeoraptor*: An Example of Evolutionist Fanaticism and Imaginary Dinosaur-Bird Links”).

Alan Feduccia summarizes the matter in these words:

Finally, no feathered dinosaur has ever been found, although many dinosaur mummies with well-preserved skin are known from diverse localities. [79]

Even if feathered dinosaurs had existed, they would provide no evidence for dino-bird evolution, because the feathers claimed for such dinosaurs bear no resemblance to the unique structure of bird feathers. Moreover, in addition to their complex designs, bird feathers also have very different biochemical structures. No structures resembling bird feathers are to be found in other creatures. According to the Connecticut University professor of physiology and neurobiology Alan H. Brush, “the protein structure of bird feathers is unique among vertebrates.” [80]

The Claim That Feathers First Developed for Insulation Is Groundless

Some evolutionists maintain that dinosaurs developed feathers for insulation and later arranged them for the purpose of flight. Other claims include that dinosaurs developed feathers to repel water, to collect excess sulphur waste, to be used as a thermal shield, or to achieve higher running speeds. Yet none of these hypotheses has any validity in explaining birds’ aerodynamic structures.

Richard O. Prum of Kansas University writes a comprehensive criticism of these theories:

Current functional theories are insufficient to explain the origin and diversification of feathers and are a hindrance to evaluating. [81]

In suggesting that feathers developed for reasons other than flight, they cannot explain how scales on the skin developed into a wholly different structure such as feathers. As you have seen, no fossils have ever been found to show scales developing into feathers, nor forearms into wings. [82]

Alan Feduccia, the best known critic of the theory that birds are descended from dinosaurs, says that he has seen no evidence that dinosaurs had feathers, and very much doubts that he’ll ever see any in the future. Feather, he states, “are the most complex appendages ever produced by the vertebrate integument” and that it is impossible for them to form on a non-flying living thing. [83]

Another problem for evolutionists is that the feather structure necessary for thermal insulation is completely different from that used for flying. The best thermal insulators is down —feathers without hooks, since hooks stiffen the flight feathers. Therefore, there is no need for soft insulation-feathers to acquire a hooked structure. Such evolutionist claims actually contradict the mechanism of natural selection! Alan Feduccia makes the following admission, although he is evolutionist:

. . . every feature of them [feathers] has aerodynamic functions. They are extremely light, have the ability to lift up which increases in lower speeds, and may return to their previous position very easily. [84]

The feathers of flightless birds—chickens, for example—are very different from those of flying birds. The feathers of flightless birds are tasseled, rather than displaying the aerodynamic structure of those of flying birds. Their tassels are similar to the hairs covering the bodies of mammals—which are arranged so as to provide excellent insulation. [85] Therefore, feathers with a tasseled structure, that do not make flight possible, pose an advantage in terms of insulation.

This deals a severe blow to the evolutionist scenario assuming a progression from thermal insulation to flight. According to that scenario, feathers that evolved for thermal insulation at the outset must have a tasseled structure. Therefore, natural selection will favor only feathers providing improved insulation—in other words, more tasseled feathers. This discourages progress from a tasseled structure to an aerodynamic one.

No fossil records show that the insulating feathers' structure began specializing in the direction of flight. Hair-like feathers in flightless birds actually require this development process to work in the exact opposite direction. In conclusion, not only is the hypothesis that bird feathers evolved from reptile scales self-contradictory, but there is no evidence in the fossil record to support it.

Detailed Creation in the Feather's Structure Shows Artistry of Allah

In analyzing the complex structure of bird feathers, Nic Bishop says this in his book The Secrets of Animal Flight:

Feathers may look simple, but they're really very complicated. Each one can have more than a million tiny parts.1

Feathers' complex anatomy varies according to their function. For example, flight feathers' complex shapes result from small wings, resembling fabric, that extend towards both sides. This stem is strong yet hollow, and the extensions on it—known as hooks—have a strong but flexible structure.2

The barbules on the feather have to be strong, yet flexible enough not to snap in the wind. Thanks to this special creation, birds can make better use of air currents than the best gliders ever designed by engineers. Were it not for the tiny hooks in their feathers, birds would be unable to fly at all. These hooks prevent wind damage to the feathers by separating from one

another under certain circumstances. However, they can easily combine again when the bird grooms itself with its beak.

Roger Tory Peterson, an expert author on ornithology, says this:

The feather is a marvel of natural engineering. It is at once extremely light and structurally strong, much more versatile than stretched skin on which a bat supports itself in flight, or the rigid structure of an aircraft's wings—and far more readily repaired or replaced when damaged . . . Though nearly weightless, it has strength. The stiff shaft of the quill provides rigidity when support is needed, yet it is supple towards its tip, when flexibility is required for split-second aerial maneuvering. Feel the sleekness of the web, soft yet firm. Separate the barbs; zipper them together again by running them through the fingertips as a bird would preen with its bill. The intricacy of the design that allows this can be appreciated by putting the feather under microscope. 3

Feathers have been specially created to permit the bird to fly by causing the air on their upper surface to flow faster than on the lower. Air pressure on the wing is thus reduced, via what is known as the Bernoulli effect. The top surfaces of a plane's wings are, similarly, more angled than the undersides. In this way, air flows more quickly over the top surface, reducing the air pressure there. Since the pressure on the underside of the wing is greater than on the upper, a force that will lift the plane is created and the plane takes off. In birds, the flight feathers are asymmetrical in order to achieve this same effect. In addition, smaller feathers in the wing's front edge are in direct contact with the air.

The complex aerodynamic principles in the avian wing also include a mechanism that reduces the negative effects of air pockets and downdrafts, the main cause of plane crashes.4 The specially created fissures at the edge of the bird's wing transmit part of the air. This is a feature that engineers seek to imitate in modern planes by designing additional small wing edges on the wings.

Moreover, birds are able to change the shape of their wings in such a way as to facilitate air flow during takeoff, flight control and landing. They can also fold their feathers to alter their air resistance, by the use of an exceedingly complex tendon system.5

Bird feathers, the underlying skin and subcutaneous muscles, the tendons that connect the bones and organs, the brain, and sense organs are interdependent. This system, essential for flight, is irreducibly complex. The absence of any one component will prevent flight. The fact that details such as the angle and thickness of the feathers' parts exhibit so little variation is vitally important,6 because minor variations will impair the system in general.

Special muscles in the skin let the bird move its feathers in a detailed, controlled manner. This system helps the bird fly and also protects it. Birds puff up their feathers to discourage their enemies by appearing larger, to keep themselves warmer, or to attract the interest of other birds during the mating season.7

Another condition for flight is that the feathers in the wing and tail must be laid out exactly as required—which presents another problem for evolutionists. Feathers, whose origins evolutionists are unable to account for in any case, must also be arranged in an appropriate

manner to make flight possible at all. The angle that feathers need to lie in, their size and location, and their need to be arranged symmetrically in both wings cannot be explained in terms of unconscious, random genetic changes.

The information regarding all feathers' physical structures lies hidden in DNA, as does the number of keratin layers and their thickness, the number of barbules, colors, the distance between feathers, and all of other details. As we know, the slightest error in the sequencing in a living thing's genetic data—its DNA—causes serious morphological and functional defects. To believe that such sequencing errors, or mutations, originally gave rise to feathers is to believe in the impossible. The encoded information for the growth of a feather is very different from that for a scale. Scales developing into feathers, as evolutionists claimed, requires the emergence of brand-new data in the specie's DNA.

Every detail in the feather structure, such as its shape and color—the hook and corresponding barb being of the right thickness, for example—must be determined by new instructions added to the genetic code. However, the effects of natural selection and mutation, which the theory of evolution maintains are unconscious and random, cannot explain how the genetic information for such a perfect structure arose in a bird's DNA.

In addition to the feather's complex structure, it is also impossible for its beauty and symmetrical, regular patterns to have emerged via random mutations, as evolutionists would have us believe. Countless laboratory experiments have definitively demonstrated that mutations cannot add information to an organism's DNA. Mutations always lead to defects in a creature's systems or morphology (form). To believe that complex structures and stunning beauty like the peacock's came into existence through random mutations is as illogical as believing that a wooden shack could transform into a palace under the effects of rain, lightning, and wind.

1. N. Bishop, The Secrets of Animal Flight, Boston: Houghton Mifflin, 997, p. 9.
2. W. J. Bock, "Explanatory History of the Origin of Feathers," American Zoologist, Vol. 40, 2000, pp. 478-485.
3. R.T. Peterson, "The Birds," Time, New York, 1963, p. 33.
4. M. Denton, Evolution: A Theory in Crisis, Adler and Adler, Bethesda, 1986, p. 202.
5. Ibid.
6. S. F. Tarsitano, A. P. Russell, F. Horne, C. Plummer, K. Millerchip, "On the evolution of feathers from an aerodynamic and constructional point of viewpoint," American Zoologist, Vol. 40, September 2000, pp. 676-686.
7. S. Burgess, "The Beauty of the Peacock Tail and the Problem with the Theory of Sexual Selection," The In-Depth Journal of Creation, Vol. 15, No. 2, 2001, pp. 94-102.

EVOLUTIONIST ERRORS REGARDING BIRD FEATHERS

Some evolutionist publications equate the fact that in peacocks and certain other bird species, the males are more brightly colored and showier than the females with the sexual selection thesis set out by Darwin in his book The Descent of Man, and Selection in Relation to Sex, published in 1871.

In sexual selection, the stronger, more impressive animals in a population are more attractive to the opposite sex and thus have more offspring. According to this distorted logic, the showy patterns and designs in some male birds are features acquired over time, as a result of females "naturally selecting" more physically impressive males. However, no scientific findings square with Darwin's thesis. Such interpretations are nothing more than an evaluation of the attributes of living things through an evolutionist preconception.

One evolutionist scientist who opposed to such interpretations set his views out in Nature magazine:

There are several other possible reasons for sexual differences which this study did not address, says Trevor Price of the University of California at San Diego, who also works on differences between bird species. For example, he says certain territorial species that fight a lot show large sexual differences, perhaps because bigger, brighter males intimidate invaders and win more fights—and more mates. Nonetheless, these male populations maintain diversity, Price says, as duller males can sneak in some copulations while flashy males are busy fighting.1

To maintain that bird feathers were shaped by evolutionary mechanisms, adherents must describe mutations that could lead to the form changes in feathers, but without harming the host creature. In fact, however, there is no evidence that such mutations are possible. Furthermore, the frequency of such mutations in nature must be estimated and in the light of this genetics data, a calculation made as to whether such an evolutionary process is actually possible. One similar calculation was performed by the Israeli biophysicist Lee Spetner, who concluded that, according to population genetics data, it is impossible in practical terms for one species to evolve into another.2

But evolutionists deal not with realistic calculations like this, but with imaginary scenarios. Due to their blind belief in the existence of evolution, they make do with asking, "Which scenario?" and seek to answer that question with the help of their imaginations. They interpret the fact that bird feathers have colors by saying "Brighter colors are encouraged through natural selection." They explain the fact that some birds have drabber colors by saying that they are drab because natural selection made drabness an advantage in avoiding the notice of predators. One can come up with explanations for anything in terms of natural selection, yet these will be solely imaginary. Therefore, the theory of evolution is not scientific, but a dogmatic mode of interpretation. Anyone who does not condition himself with Darwinist preconceptions and approaches the issue with reason and logic will easily realize that the

extraordinary signs of creation in living things cannot be the products of unconscious natural mechanisms, but reveal the infinite might and artistry of Almighty Allah.

1. “Sex Drives Birds Apart: Promiscuity Makes Females Dull And Males Flashy,” Nature Science Update, 13 March 2001; http://www.nature.com/nsu/010315/010315-5.html
2. Lee Spetner, Not By Chance, New York: The Judaica Press, 1997.

THE INTENTION IN BIRDS’ ANATOMY AMAZES SCIENTISTS

During an interview in Australia, Professor Andy McIntosh, a member of the University of Leeds teaching staff and an expert in the field of aerodynamics, made the following comments about the perfect structure in birds:

Prof. Andy McIntosh: Many aspects of nature show that creatures have been designed. . . creatures which fly. I got here to Australia on a great big jumbo jet. I watched the careful maneuvering as it came down to land, as the great big flaps came out at the back, increasing the size of the wing to get more lift so as to fly at a much slower speed. I was struck by all the design that went into that wing in order to make sure it worked. Now, are we to say that the birds which come to land every day weren’t designed? I have seen a photo in a book, of an aircraft landing at Hong Kong, and underneath it is a falcon landing at the same time. Now as you look at birds and planes together, are you going to say that one is designed and the other isn’t? I would find that scientifically preposterous.

Chris Field: We know that in order for modern flight to take place, countless thousands of man-hours and much high technology had to go into the design process.

Prof. Andy McIntosh: Indeed—I would take issue with people like [atheistic Oxford professor] Richard Dawkins, with his view that flight somehow came about by chance, just because some creature took a jump, then mutation added bits to its structure, so it could jump further, and so on. It just doesn’t fit. It’s obvious that these creatures have not come about by chance and selection, but have in fact been designed.

Chris Field: Why the particular interest in flight?

Prof. Andy McIntosh: Well, I am originally an aerodynamicist—my Ph.D. was in an aerodynamics department. Bird flight in particular is remarkable. Consider feathers. If you look at a feather under a microscope, you see the main stem, with barbs coming out to the left and right, and from these you have left-and right-handed barbules. Now, the interesting bit is that the left-handed ones have hooks, and the right-handed ones have ridges.

Chris Field: That’s so the feathers lock together.

Prof. Andy McIntosh: That’s right. The feather is made such that if you bend it, everything bends with it, and yet it’s a very light structure. So the hooks catch the ridges and they slide over the ridges—it’s a mechanical engineer’s dream to have such useful, lightweight

engineering. But if you have a sliding joint, you need lubrication. To do this the bird twists its neck around 180° and dips its beak into a tiny oil gland right down at the back of its spine. It then preens itself, wiping this oil all over its feathers, so that they join together nicely, and these sliding joints are oiled. That's a marvellous bit of engineering. So is the fact that birds, unlike us, have hollow bones. To be strong enough, particularly in the bigger birds, these lightweight bones often have cross-members. In aircraft we call the design 'Warren's truss,' but we copied it from birds in the first place. . . Design is shouting at me everywhere. 1

As you have seen, those whose mental horizons are not restricted by belief in evolution can easily discern the signs of superior creation in living things. They see the illogicality of seeking to account for these in terms of chance, and can appreciate Allah's creation in living things.

People with such awareness are described in these terms in the Qur'an:

The kingdom of the heavens and Earth belongs to Allah. Allah has power over all things. In the creation of the heavens and the Earth, and the alternation of night and day, there are Signs for people with intelligence: those who remember Allah, standing, sitting and lying on their sides, and reflect on the creation of the heavens and the Earth: "Our Lord, You have not created this for nothing. Glory be to You! So safeguard us from the punishment of the Fire." (Surah Al 'Imran, 189-191)

1. "Flying high,", an interview with Dr Andy McIntosh by Chris Field

THE IRREDUCIBLE COMPLEXITY IN WINGS

One obvious distinguishing feature between birds and reptiles is that birds have wings. As you saw in the preceding chapter, the feathers comprising the wing constitute a field of research all of their own, and their complex creation amazes scientists. However, for a bird to be able to fly, it is not enough for it to have feathers. Those feathers need to be distributed in a specific sequence equally on both wings. If you set out a bird's feathers at random—and the feathers are denser on one side, for example—then an imbalance will arise, and the bird will be unable to fly. In addition, the facts that wings can be opened and closed, that both are symmetrical, that their structure permits flight techniques, all show that they have been specially created for flight.

Although scientists use birds as models to imitate, they can never manage to produce wings as successful as birds'. Considering that humans, possessed of reason and technology, cannot imitate the wing that birds possess from the moment they are hatched, you can better see how these animals' ability to fly is a miracle of Allah.

How did such complex structures as the eye, lung, wings and the cell develop in stages? This question is one of the greatest dilemmas facing evolutionists. These structures consist of interrelated components, none of which serve any purpose in the absence of any other. They

cannot have formed gradually, as evolutionists claim, because the absence of any one component will make the organ functionless. Scientific literature refer to this as irreducible complexity. Since a half-developed wing will be of no benefit to an organism, then according to evolution's own claims, that useless organ will become vestigial and gradually disappear.

This presents an insoluble problem for the theory of evolution. The atheist evolutionist Richard Dawkins effectively admits as much:

Evolution is very possibly not, in actual fact, always gradual. But it must be gradual when it is being used to explain the coming into existence of complicated, apparently designed objects, like eyes. For if it is not gradual in these cases, it ceases to have any explanatory power at all. Without gradualness in these cases, we are back to miracle, which is simply a synonym for the total absence of explanation. 86

Evolutionists offer inconsistent explanations to the effect that wings developed from reptiles' forelegs. In essence this scenario runs: "Some reptiles grew a few hairs on their forearms and used these to catch insects. However, most insects escaped before they could carry them to their mouths (!) The system did not work well in this unbalanced state. They could not fly, nor climb trees, nor escape into any hole in the ground. Under these conditions they needed to undergo a change in order to flee their enemies. Just at that point coincidences performed the necessary alterations in these creatures and turned them into living things capable of flight."

This and similar scenarios, no more logical than fairy tales, cannot explain how these changes combined in a specific sequence and in such a way as to respond to the creature's need to catch insects. In his book Darwin's Dangerous Idea, Daniel C. Dennet condemns Darwin's claims that unconscious mechanisms could give rise to the perfect living things in nature:

Here, then, is Darwin's dangerous idea: the algorithmic level is the level that best accounts for the speed of the antelope, the wing of the eagle, the shape of the orchid, the diversity of species, and all the other occasions for wonder in the world of nature. It is hard to believe that something as mindless and mechanical as an algorithm could produce such wonderful things. No matter how impressive the products of an algorithm, the underlying process always consists of nothing but a set of individually mindless steps succeeding each other without the help of any intelligent supervision; they are automatic by definition: the workings of an automaton. They feed on each other, or on blind chance—coin-flips, if you like—and on nothing else. . . . Can it really be the outcome of nothing but a cascade of algorithmic processes feeding on chance? And if so, who designed that cascade? Nobody. It is itself the product of a blind, algorithmic process. 87

Dennet then cites Darwin's words regarding what would invalidate his natural selection theory: As Darwin himself put it, in a letter to the geologist Charles Lyell shortly after publication of Origin, "I would give absolutely nothing for the theory of Natural Selection, if it requires miraculous additions at any one stage of descent . . . if I were convinced that I required such additions to the theory of natural selection, I would reject it as rubbish." 88

In the above words, Darwin admitted that to account for the origin of living things, the need for “miraculous additions” would invalidate his theory. At that time, science was not sufficiently advanced to disprove Darwin’s claims. However, scientific understanding attained in the 20th century showed that living things could not be explained in terms of coincidence. It was concluded that the flawless structures in living things—a bird’s wing, for instance—had to have arisen without any transitional stages.

This is just one example showing that Darwin’s worries were justified.

For a bird to be able to fly, its wings must be strongly attached to the bird’s breast protrusion. The wings must also have a structure able to lift the bird into the air, maintain balance and change direction. It is also essential that the feathers be light, flexible and in proportion to one another functioning in a perfect aerodynamic order that permits flight. But here evolutionists find themselves in a grave predicament: They cannot explain how a reptile’s forearms could have turned into flawless wings through defects (mutations) arising in its DNA. To assume that flight evolved means that at certain stages, the wing was insufficient—and thus, impractical. Yet flying with insufficient wings is out of the question. In order for an animal to fly, its wings and the anatomy supporting those wings must be perfectly and fully formed.

Engin Korur, a Turkish evolutionist biologist, admits as much:

The common feature of eyes and wings is that they can fulfill their functions only if they are fully developed. To put it another way, one cannot see with a deficient eye, nor fly with half a wing. How these organs formed is one of the still unsolved mysteries of nature. 89

As the above extract makes clear, even if we assume that some mutation did bring about a change in a reptile’s forearms, it is still irrational to expect that new mutations might be added to this and that a wing could emerge by chance. Any mutation in the forearms will not endow the creature with functioning wings, but will deprive it of functioning forearms. This will leave the deformed creature disadvantaged in comparison with other members of its species. According to the theory of evolution, natural selection will then eliminate that handicapped individual.

The Harvard University paleontologist James Gould wonders whether such deficient structures could be of any use:

Gradualists usually extract themselves from this dilemma by invoking the extreme imperfection of the fossil record—if only one step in a thousand survives as a fossil, geology will not record continuous change. Although I reject this argument . . . let us grant the traditional escape and ask a different question. Even though we have no direct evidence for smooth transitions, can we invent a reasonable sequence of intermediate forms—that is, viable, functioning organisms—between ancestors and descendants in major structural transitions? Of what possible use are the imperfect incipient stages of useful structures? What good is half a jaw or half a wing? The concept of preadaptation provides the conventional answer by permitting us to argue that incipient stages performed different functions . . . But a plausible story is not necessarily true. . . . but does it [gradualism] permit us to invent a tale of continuity

in most or all cases? I submit, although it may only reflect my lack of imagination, that the answer is no. . . . 90

Biophysical research has shown that mutations occur only rarely. Therefore, it is impossible for these imaginary reptiles who possessed incompletely developed wings, to wait millions of years for mutations to complete them. In addition, mutations always have harmful results. All these scientific facts invalidate the scenarios of dinosaur-bird evolution.

One of the most frequent evolutionist claims is that needs endow living things with useful organs. We are told that some animals gradually developed oral cavities out of a need to feed, that others developed feet by seeking prey on land, that some acquired wings because flight would be advantageous, and many other such tales. In short, Darwinists use the mechanisms of natural selection and mutation to account for every feature we see in animals.. However, all these unscientific claims are totally unable to explain the origin of complex structures in living things.

It would be irrational to expect unconscious cells, which allegedly came into being by chance, to agree among themselves and come up with a plan to give rise to a wing that will enable the body to fly—and then to work until they achieved the appropriate scale and structure. In such a case, the cells comprising the wings would need to be aware of the functions of other organs and cooperate with them. Having achieved the most appropriate structure, they would also have to take a collective decision to stop evolving.

To suggest that any complex structure appeared as the work of chance would be irrational and illogical. Yet rather than accept the truth of creation, evolutionists prefer to lend credence to such an irrational possibility, and even to refer to it as not worth debating.

However, countless questions are raised by these coincidental evolutionary scenarios. For example, how is it possible for chance, unaware of the existence of an ability such as flight, to identify a need for it and to design the wing in a flawless manner? How can the cells consider all the relevant details such as structure, size and shape, enter into a division of labor with other cells and build such a complex organ as the wing?

It is of course impossible for chance to do any such thing.

Even a single bird is sufficient evidence to disprove the claims of evolution. The fact that evolutionists insist on denying that truth shows that they defend their theory in the face of all the facts.

SCIENTISTS' DREAM: PLANE WINGS AS MOBILE AS THOSE OF BIRDS

The Morphing Project, managed by Anna-Maria McGowan and carried out at the NASA Langley Research Center, aims at producing a plane able to move its wings according to varying weather conditions—just like a bird. Presently, the wings of subsonic planes (those traveling at less than the speed of sound) are manufactured according to a specific height, speed

and load. When flight conditions change, however, the shape of the wing must also change. In McGowan's words, "The kind of wing you need at very low speed and the kind of wing you need at high speeds are completely different."1 Otherwise, problems will arise such as excessive fuel consumption, unwanted turbulence and excessive noise.

Under present-day circumstances, however, such wing changes are impossible because wings are made from very hard materials. For that reason, NASA is working on an "intelligent wing" project, run with the participation of DARPA (Defense Advanced Research Project Agency) and the AFRL (Air Force Research Laboratory). The objective is plane wings that are connected to a central electronic system, as living things are by their nervous system.

Bill Uher of the NASA Langley Research Center says this about the project:

The receptors will be nerves just like those in the bird wing and will constantly measure surface pressure. Activators will either expand or contract the aircraft's wings. Thus they will change the shape of wings, just like muscles. 2

In the wing model currently being worked on, the mechanical energy of the forces applied is turned into electrical energy, and the energy created that emerges by means of structures resembling joints, gives rise to a movement resembling flapping. Tests show that the wing can bend up to 20 degrees. It's expected that the Morphing Project will make still more progress in designing new wing structures inspired by the flying techniques of birds.

The objective is the design of wings that can fold themselves, like those of birds, without the need for moving parts. Friction will thus be reduced, and fuel saving increased. Birds are again the chief model to make this dream a reality: wings that can stretch and change shape according to prevailing air conditions, and which can adjust themselves as they fold up.

Some present-day planes—namely, the military's F-14, Tomcat and B-1 Supersonic bomber—are able to adjust their wings. However, these planes use wide, rigid wings mounted onto heavy struts located in the aircrafts' fuselage. Scientists working on the Morphing Project are designing wings that can open on command, by using metal compounds and materials they describe as having "shape memory" or "intelligence." The theory is that when a specific level of heat is applied, these wings will immediately revert to their original shapes with great force.

The materials used in these wings' manufacture—piezoelectric materials (which create electrical energy from pressure)—link electrical voltage to movement. If you bend a piezoelectric material, it produces voltage. Conversely, if you apply voltage, the material will bend.

Anna-Maria R. McGowan, director of the Morphing Project, says about the technology in question:

When we look 20 years into the future, we see airplanes that have distributed self-assessment and repair in real time. . . . To make this technology possible, you would need to distribute these actuators and sensors throughout the wings. That's similar to how the human body operates. We have muscles and nerves all over our bodies—so we are aware of what's happening to our bodies and we can respond to it in a number of ways.3

One method employed in the Morphing Project's research is the analysis of systems that already exist in nature. From these models, scientists hope to learn techniques that they can use to develop their own designs. As McGowan says,

Birds are so much more maneuverable than our airplanes are today. Birds can hover, they can fly backwards and sideways. And insects—upside down, loop-de-loop, all sorts of things. We can't even get close to that. 4

Achievements in this technique of learning from nature, known as biomimetics, have led scientists to imitate the structure of avian bones for airplane wings. Birds' bones are light, strong and porous, with a hollow structure that admits air. McGowan states that they hope to achieve a similar structure:

If you can have the strength and light weightiness of these bone-like structures that I'm talking about, then add in nerve-like sensors and these flexible actuators, what you're going to end up with is an extremely light-weight, very strong, self-sensing, self-actuating structure.5

All these are ideals that scientists have set out through being inspired by birds' wings. If a bird can act as a source of inspiration for a scientist, if it can serve as a guide for a project, then clearly there is something quite extraordinary in its structure. It is impossible for such a perfect structure to be the product of unconscious coincidences and random processes. The intelligence that scientists seek to imitate and which so amazes them is just one of the countless examples of the infinite intelligence, knowledge and creative artistry of Allah.

1. Patrick Barry, "Bionic Research Points To Smart Flexible Aerospace Materials," Space Daily, 5 March 2001; http://www.spacedaily.com/news/materials-01f.html
2. "When The Planes Flap", Science et Avenir, January 2003, p. 74.
3. Patrick Barry, op. cit, http://www.spacedaily.com/news/materials-01f.html
4. Ibid.
5. Ibid.

THE PERFECT FLIGHT TECHNOLOGY IN LIVING THINGS

In many ways, it is impossible to account for birds' ideal structure for flight in terms of evolution. The structure of the wing as described in the last chapter is just one of these impossibilities. Flight is based on a very complex system, and to control it, the bird must have a nervous system capable of controlling its muscles flawlessly. In this nerve-muscle control, after the muscles contract with commands they receive from the nerve cells, they transmit back signals that report their position. When a bird rises, glides in the air or descends to earth, this feedback system goes into action to create the required aerodynamics.

When we examine how animals adapt to their environments, we realize that the mechanisms' in many creatures' bodies go far beyond the technological achievements that we

humans are so proud of. Flight is one of the most striking examples. If a small airplane were as efficient as a plover, it could fly for 56 kilometers (34.796 miles) on a single liter of petrol. At present, however, such economical flight is no more than a designers' and engineers' dream.

Birds' perfect aerodynamic structure, which amazes scientists, can be seen in every detail of their bodies:

* Feathers which, in proportion to their weight have a very strong but also flexible and light structure,

* Powerful wings controlled by powerful muscles,

* Flexible, strong but also light and hollow bones,

* A unified skeletal structure,

* A large, powerful heart and a circulatory system with high levels of blood pressure and the pigment myoglobin, which facilitates respiration,

* A respiratory system with air sacs extending as far as the bones,

* A digestive system that ensures high body temperature and sugar accumulation,

* The collection of waste fluids in the body for the purpose of preventing water and weight loss,

* A navigation system, the secrets of which have still not been understood,

* Powerful nerve co-ordination that regulates the position of every feather during flight . . .

None of these properties, of which more could be listed, is sufficient for flight on its own. Yet birds are able to fly when all features are present together. It is impossible for each one to have developed gradually, independently of all the others, and then to adapt to one another. All these features make bird flight possible, but none can do so independently, on its own.

The researcher and writer Richard Milton is a documentary producer for BBC and NBC and a member of the Geology Society, has this to say about the aerodynamic structure in bird flight:

. . . I believe that this example represents a belief shared by many, Darwinist or not: There is inevitability in the design of human beings and other species. There is a delicacy and beauty in bird flight [that] other less efficient flight designs lack, and this enables birds not just to conquer the skies, but also to rule them. In addition, this perfect form can clearly be seen in artificial, human designs such as automobiles and jet planes: many experimental designs over tens of years have reached an optimum design by being passed through the filter of experience . . . the flight of the eagle and the fast running of the cheetah … these animals have not reached a random point in the genetic sphere; they enjoy an unrivalled position enabling them to make the best use of their surroundings. 91

For years, birds' matchless modes of flight and wing structure have been a source of inspiration for aeronautical engineers. Yet obviously birds could not produce all these components on their own. It's equally irrational to imagine that a so-called evolutionary process, working at random, could have produced all these perfections. Their structures were

evidently created so that birds could fly. This creation is that of our Almighty Lord, and "There is no creature He does not hold by the forelock" (Surah Hud, 56).

In another verse of the Qur'an, our Lord Allah reveals:

Have they not looked at the birds above them, with wings outspread and folded back? Nothing holds them up but the All-Merciful. He sees all things. (Surat al-Mulk, 19)

Birds Carry out Their Aerodynamic Flight through the Inspiration of Allah

The science of aerodynamics studies the movement of solid bodies through fluid ones such as air. For example, when a plane moves through the atmosphere, it produces various forces that affect its movement. In the face of these aerodynamic forces, engineers produce designs that will enable planes to move through the air more easily.

In order for any object, planes included, to move through the air without encountering any unexpected force or resistance, it is first tested against air resistance in a so-called wind tunnel. This is done either by passing a current of air over a fixed, stationary model of the plane in a laboratory environment. The movement of the body and the surrounding air is then adjusted according to resulting calculations, measurements and further experiments.

SCIENTISTS CONTINUE TO DRAW INSPIRATION FROM THE PERFECTION IN LIVING THINGS

Inspired by the way that geese fly, scientists are developing a system that will enable planes to fly autonomously for long distances in a V formation. They hope that this flight pattern will lead to energy savings for planes, as it does for geese during their long migrations.

Jet planes following in a V formation save energy by following in the slipstream set up by the leading plane. Keeping the lead plane at the ideal location manually is a tiring business, and so engineers at NASA's Dryden Flight Research Center, UCLA and Boeing facilities are developing a system to do this automatically. One day, scientists hope, passenger, freight and military planes will be able to make energy savings of 20% by imitating geese's flight pattern.

Brent Cobleigh, chief engineer on the project, says, "A 777 airplane flying 250 days a year, going from New York to L.A. and back once a day, would save a half a million to a million dollars in fuel."1 Indeed, two NASA jets first showed that this flight pattern could provide major fuel economies. Despite flying the same distance, the second plane used 12% less fuel than the leader.

1. Fenella Saunders, "It's a Bird, It's a Plane," Discover, Vol. 23, No. 5, May 2002.

THE WISE CREATION IN BIRDS' METABOLISMS

Hummingbirds possess the fastest metabolic rate of any vertebrate. Their hearts, which beat 700 to 850 times a minute when the birds are at rest, begin beating 1,200 times a minute when they hover in the air. In relation to their size, they expend more energy than a jet plane. If you consumed energy at that same level, your body temperature would rise to 400 degrees Celsius—and in order to meet that energy requirement, you would have to eat 45 kilograms of sugar every day.

Yet when at rest, these birds reduce their body temperatures from 40 to 15 degrees Celsius and efficiently slow their metabolisms at the same time. They adopt a particular posture in order to save energy, during which they puff up their feathers, raise their beaks up in the air and reduce their heart beat to 50 beats a minute.1

Allah has created these tiny creatures with a great many superior features. For anyone able to appreciate Allah properly, these birds are one of the countless proofs of His powers. In one verse it is revealed:

And in your creation and all the creatures He has spread about there are signs for people with certainty. (Surat al-Jathiyya, 4)

1. John Downer, Supernature: The Unseen Powers of Animals, New York, Sterling Publishing Co., Inc., 1999, pp. 161-162.

Models of planes, rockets, cars, and even bridges and buildings are first tested in such wind tunnels, in which they are exposed to air currents adjusted to the speed of the experiment. By observing the behavior of these models in the streamline flow, necessary adjustments are made to give the model a more aerodynamic shape.

Aerodynamics comprises a wide range of disciplines, from aviation and space research to the automobile industry and civil engineering. For example, in order for a new car to be economical and expend less fuel, a model of it is first tested in a wind tunnel, and engineers try to find the aerodynamic shape with the least resistance. Birds' unique and flawless properties, which exhibit the principles of aerodynamics, amaze scientists. They fly perfectly, with no trial and error and with no need for any subsequent adjustments.

As birds glide, they remain aloft in the same way as planes. In addition, while birds flap their wings to descend or climb, planes must use powerful engines and control systems to achieve the same results. A plane's wing is tilted in the same way as a bird's. Unlike human engineers, however, birds carry out no tests, and are born possessing an aerodynamic structure and powerful wing muscles to provide them with the needed energy during flight.

Modern analysis of bird flight is made possible by extraordinary technological advances and the discoveries in the fields of flight mechanics and aerodynamics. Birds possess none of

this knowledge, however; they can neither analyze nor calculate, nor perform test flights. Yet they still maneuver to perfection, glide, accelerate, descend and stop suddenly because Allah has created them with a perfect flight system—the most superior technology—from His own knowledge.

Do they not see the birds suspended in midair up in the sky? Nothing holds them there except Allah. There are certainly signs in that for people who believe. (Surat an-Nahl, 79)

The Aerodynamic Technology in Birds Continues to Inspire Engineers

The perfect flight systems in birds are an inspiration for engineers. Seeking to produce the most efficient designs with the most appropriate materials and at the lowest cost, engineers have long been imitating this superior creation in nature. For example,

* Plane wings are hollow, like bird bones. Inside of bird bones, there are fine struts between the opposite surfaces to reinforce them. The same kind of struts are used in aviation engineering, serving as a skeleton that holds the wing together despite strong and variable air currents. Known as Warren's trusses, these have been copied from bird bones. 93

* The ailerons used to control a plane's altitude and which angle down from the wing have been arranged to imitate the movement of the wings as a bird lands.

* In the same way as birds' heads, airplanes have a nose intended to overcome air resistance.

Modern-day planes' ability to make sudden maneuvers is much lower than birds'. In order to manufacture planes with higher maneuverability, we need a better understanding of the birds' aerodynamic systems. William Zamer of the American National Science Committee says this about one study performed on birds.

The results may also one day help humans design better vehicles for both land and air travel. 94

The following statement appeared in a scientific article about birds in Reader's Digest magazine:

Compared to birds, a marvel of aerodynamics, even the most advanced aircraft are nothing more than crude copies. 95

BIRDS' FLIGHT TECHNOLOGY: HUMANITY'S CONSTANT DREAM FOR HUNDREDS OF YEARS

One goal that has literally become a dream for scientists is wing beating. A hawk beats its wings 2.5 times a second at an angle of 120 degrees, and a hummingbird 80 times a second, while machines produced by humans are far from displaying such mobility and flexibility. Engineers have produced aircraft able to fly over mountains and oceans, yet it is still not possible for them to ascend by flapping their wings. The University of Toronto's ornithopter—a machine designed to carry a human passenger into the air by flapping its wings, in imitation of birds, bats or the pterodactyl, a flying reptile that lived in prehistoric times—is one model that most closely approaches this ancient aeronautical dream.

Patricia Jones-Bowman, an ornithopter test pilot, says:

The race is on to be the first in history. It's been 500 years since Leonardo da Vinci (designed an ornithopter), and it is time for this to be conquered.1

In order to discover aerodynamic secrets, Jones-Bowman makes use of fossils of the pterosaur, bat-like reptiles whose membranous wing span reached up to 10 meters (32.8 feet). According to the U.S. Defense Department, however, beating wings present a number of aerodynamic problems that make it difficult to replace fixed-wing planes.

As you have seen, it is even more difficult to combine both conditions—wing beating and reduction in size. The fact that birds have small bodies and can flap their wings with no difficulty should make people reflect on the perfection in Allah's creation.

People engaged in the field of biomimetics study tuna in order to unravel the secrets of swimming, grasshoppers to unravel those of jumping, and cockroaches and lobsters for rapid navigation in bumpy spaces. Wings interest engineers studying nature with the aim of producing new ideas in the field of machine design. Michael Dickinson, a biology professor of University of California at Berkeley who also assists with government-backed robot flight design, says this:

There is growing collaboration between biologists and engineers. If we look at the architecture nature. . . maybe we can extract that out and copy it. 2

Hundreds of years ago, this inspired Leonardo da Vinci to sketch the first plans for an ornithopter. However, it would have been exceedingly difficult to turn these drawings into a working model. In studying the flight displays put on by a sparrow or a crow, scientists revealed the principles of the science of aerodynamics.

In contrast to a plane, which moves in the air with the help of an engine, a bird obtains its own lift and propulsion force by using its wings. In order to do so, birds constantly change the angle at which their wings encounter air currents. This way, they immediately adapt to changing conditions and continue flying with no problems. Airplanes are immediately affected by weather conditions, and since flying under such conditions can be dangerous, flights have to be cancelled from time to time.

One group of students led by James DeLaurier of University of Toronto are carrying on the ornithopter goal by using birds as models. Their design will be propelled forward in an ideal flight pattern as its wings rise and fall. Scientists working on this reported on the perfect nature of birds' creation:

Like Jones-Bowman, all those who have worked on flapping flight say the work has given them new respect for the engineering genius of nature. Paul MacCready, considered to be one of the greatest living aeronautical scientists and a pioneer of human-powered flight, said he spends hours watching as birds circle and soar and hover in the breeze, marveling at the structure of bones, muscles, and feathers that makes it possible. "There is an awful lot of detail and mystery to everything that nature does," said MacCready. 3

These structures which so amaze and impress humans are not, of course, the products of nature. The stones, trees, air, water and similar things that comprise nature cannot represent the source of this matchless intellect and artistry. The stunning features in living things belong to Almighty Allah, the Creator of all nature.

1. http://www.100megsfree4.com/farshores/nflight.htm
2. Ibid.
3.Ibid.

ONLY ALLAH IS WORTHY OF PRAISE

Quetzalcotalus is an extinct species of bird of the Pterodactyl family, with a 12 meter (39.37 feet) wing span and had no tail. This ancient creature is a source of inspiration for a new type of plane being developed at University of Pretoria. Joachim Huyssen, a University of Pretoria aerodynamic engineer and inventor, explains:

In the past hundred years of aircraft development we haven't overcome some fundamental problems. One of them is our dependence on runways. Our other need to keep the weight as low as possible. If you look at the nature, you see the aerodynamic form of a bird differs considerably from modern aircraft. The most notable difference is that aircraft do not have long tail wing. Neither do they have very specific tail surfaces. If we too can create aircraft that are tail-less, we can create a great mass advantage. Most interestingly, by doing away with the tail, we have the option of developing an aircraft that will be able to land independently of runways. 1

The news site that reported this project also commented about the perfection in nature:

With regard to flight, scientists look to birds, the experts on the subject.
The Exulans manufacturers examined the features of birds in order to
develop their planes, although it was exceedingly difficult for them to
copy the fine details in nature.2

Joachim Huyssen, designer of the Exulans plane, praises the structure of albatrosses in their ability to make controlled wing descents in restricted areas:

We observe birds, and especially in terms of their qualitative aspects of flight, we look specifically at their method of control during take off, flight and landing. One bird that is of particular interest is the albatross—it is regarded as the bird with the highest efficiency. It is a relatively heavy bird with regard to the wing size, although the wing span is quite large, but it definitely has the best lift to drag ratio in nature.3

Statements by researchers engaged on projects to imitate birds are full of amazement and praise. Yet none of this praise should actually be directed at the birds themselves, which are quite unaware of their superior properties and incomparable abilities. These creatures made no contribution to the superior characteristics they possess. We should direct our praise towards Almighty Allah, the true Lord of these superior characteristics and the most worthy of praise. However, we must also remember that only we are in need of the praise we give to our Lord. In one verse of the Qur'an, Allah reveals:

. . . If you were to be ungrateful, you and everyone on the Earth, Allah is Rich Beyond Need, Praiseworthy. (Surah Ibrahim, 8)

1. http://www.tvpc.co.za/Sci-tech/exulans/exulans.htm
2. Ibid.
3. Ibid.

OTHER DIFFERENCES BETWEEN BIRDS AND DINOSAURS

The differences between dinosaurs and birds are not limited to those discussed earlier. There are many other differences such as the structures of their teeth and talons, their metabolisms, their skulls, and their eggs. Birds and reptiles possess entirely different anatomies, specially created in accord with the vertebrate's own lifestyle. If a reptile is claimed to have turned into a bird, then this must have taken place instantaneously, in a manner reminiscent of fairy-tale transformations. Stage-by-stage transformation cannot perfect a living thing, as evolutionists would have you believe. On the contrary, it will merely make the offspring less efficient. However, it is impossible to any perfect living thing to emerge in a subsequent generation by some chance re-arrangement of its genetic structure.

Alan Feduccia emphasizes that there are a great many problems with the claims that dinosaurs evolved into birds:

It's biophysically impossible to evolve flight from such large bipeds with foreshortened forelimbs and heavy, balancing tails. Exactly the wrong anatomy for flight. 96

Toe Structure

Alan Feduccia and Dr Julie Nowicki, both from University of North Carolina, recently studied the development of ostrich eggs. Examining the forelimbs of the ostrich embryos they examined, Feduccia and his team revealed that birds and theropod dinosaurs have different toe sequences, for which reason birds' wings could not have evolved from the forefeet of dinosaurs.

Feduccia's statements and the problems this poses for evolutionists are described on the American Development of Science Society's website:

"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 . . . 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." 97

Feduccia and Nowicki investigated the developmental stages of ostrich eggs and published the results of their research in the August 2002 edition of the eminent German biology journal Naturwissenschaften. Feduccia stated that their research proved that birds did not evolve from dinosaurs, summarizing their conclusions in these words:

Whatever the ancestor of birds was, it must have had five fingers, not the three-fingered hand of theropod dinosaurs. 98

As a result of their research, Alan Feduccia and A. C. Burke concluded in Science magazine that it was not possible to maintain that birds originated from dinosaurs:

It is unlikely that a shift between the typical amniote mode of development that generates digit IV through the primary axis, to a limb that develops digit III through a convergent primary axis, would maintain the pattern of cartilage condensation that is identical in avian, crocodilian, chelonian, and mamalian limbs… 99

These conclusions later appeared in the well-known journal New Scientist, under the heading "Dinosaur theory put to flight: birds may not be descended from the ancient reptiles after all":

Traditional thinking about the ancestry of birds has been challenged by biologists in the US. They say that a comparison of dinosaur claws with bird wings and feet contradicts the widespread theory that birds evolved from small, flesh-eating dinosaurs 150 million years ago.

Birds, reptiles and mammals all have four limbs, each with up to five digits. . .

But dinosaur fossils tell a different story. In theropods, the fourth and fifth digits are greatly diminished or have disappeared altogether. Feduccia maintains that animals which had lost these digits could not then evolve into birds that lack one and five. 100

Despite having spent years defending the idea that birds were descended from theropod dinosaurs, Peter Dodson, who works as a dinosaur paleontologist at the Veterinary School at

University of Pennsylvania, expresses his opinion regarding the accuracy of the evidence to the contrary:

That has been the prevailing faith for the past twenty years. They are doing a first-class job of shaking things up and making us re-examine the evidence. 101

As you see, in order for a dinosaur to turn into a bird, every point in its body, right down to its toes, would have to change and assume a specific structure to permit the bird to fly. Any transition from a dinosaur to a flying bird is one that not even reasoning, conscious human beings can perform, let alone unconscious mechanisms such as natural selection and mutations. Even if there were no evidence to disprove evolution, the use of reason and logic alone has countless times shown the theory to be invalid. Anyone whose intellect is not shrouded with prejudice will realize that a bird's features could not have emerged of their own accord, but are the work of a Creator possessed of a superior mind and knowledge. The wisdom that brought them into being belongs to Allah, Lord of all in heaven and Earth.

Teeth

Birds have beaks rather than teeth, one of the distinguishing features between them and reptiles. However, some birds that lived in the past did have toothed beaks. This was long presented as evidence of evolution, but it was gradually realized that bird teeth have a most unique structure.

Feduccia has this to say:

Perhaps the most impressive difference between theropods and birds concerns the structure of teeth and the nature of their implantation. . . It is astounding that more attention has not been given to the dramatic differences between bird and theropod teeth, especially when one considers that the basis of mammal paleontology involves largely tooth morphology. . . . To be brief, bird teeth (as seen in Archaeopteryx, Hesperornis, Parahesperornis, Ichthyornis, Cathayornis, and all toothed Mesozoic birds) are remarkably similar and are unlike those of theropods . . . There is essentially no shared, derived relationship of any aspect of tooth morphology between birds and theropods, including tooth form, implantation, or replacement. 102

David Williamson of North Carolina at Chapell Hill makes the following statements in an article titled "Scientist says ostrich study confirms bird hands unlike those of dinosaurs" published on 14 August, 2002:

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. 103

Metabolic Differences

Another difference between reptiles and birds is their metabolisms. Reptiles possess the slowest metabolisms among quadrupeds, while birds hold the record for the fastest. To put it

another way, reptiles expend the least energy, and birds the most. For example, because of its fast metabolism, a sparrow's body temperature can sometimes rise to as much as 48° C. This high temperature could only spell death for a terrestrial vertebrate, but is of vital importance to birds in increasing their production of energy, and thus strength.

Birds consume a great deal of energy in flying and for that reason, they possess the highest proportion of muscle tissue relative to their bodies. Their metabolisms have been arranged in direct proportion to the power expended by their muscles. On the other hand, reptiles are known as "cold-blooded" and cannot create their own body heat, instead warming themselves through the Sun's rays. For the most part, their body temperatures are equal to their surroundings.

Birds and mammals, of course, are warm blooded. Their bodies are able to produce heat to protect them from the cold, and also to cool them down when it is very hot. Their metabolisms are exceedingly different, and it is impossible for a reptile's cold-blooded metabolism to turn into a warm-blooded one. Some evolutionists therefore began to maintain that dinosaurs were warm-blooded. Yet there is a great deal of evidence against this thesis, which is based upon no evidence at all. 104

First off, there is no reason to think that dinosaurs were warm blooded, in contrast to all other reptiles. Asked whether there was any evidence in the fossil record (or anywhere else) to indicate that dinosaurs were warm blooded, Thomas E. Williamson of the New Mexico Museum of Natural History and Science replies:

As yet, there is probably no evidence that would definitively prove whether or not some dinosaurs were warm-blooded. Scientists have explored numerous lines of evidence to try to answer this question. There is a clear difference in bone structure between modern cold-blooded and warm-blooded animals. 105

Despite his evolutionist views, Peter Dodson, an eminent present-day paleontologist, has demolished the warm blooded dinosaur thesis and the idea that birds originated from dinosaurs:

. . . I am tepid on endothermic dinosaurs; I am skeptical about the theropod ancestry of birds. 106

There is no evidence that dinosaurs were warm blooded; on the contrary, they possess external mechanism used by cold-blooded animals to regulate their body temperatures. 107 However, due to Darwinists' dogmatic belief in evolution, they persist as if there were some evidence for their claims and continue to ignore all the evidence to the contrary.

Differences in Bodily Systems

Since birds expend a great deal of energy, they need to thoroughly digest the food they eat. Indeed, their digestive systems have a special structure that lets them use what they eat most efficiently. For example, a growing stork gains 1 kilogram (2.204 pounds) of weight with every kilos (6.613 pounds) of food. The equivalent rate in mammals eating the same foods is 1 kilo (2.204 pounds) of weight for 10 kilos (22.04 pounds).

Birds' circulatory systems have also been created in line with their high-energy requirements. The human heart beats an average of 78 times a minute, in contrast to 460 times for a sparrow, and 615 for a hummingbird. Since active flight requires a high level of energy, their blood circulation takes place much more quickly than in terrestrial animals. The oxygen needed for the high metabolic rate and energy expenditure is absorbed into the body by means of special lungs. Birds also differ significantly from reptiles in having four-chamber hearts, compared to the three chambers in reptiles'.

The Differences in Skulls and Jawbones

Comparisons between the skulls of the two groups also reveal no similarity between them. As the result of an investigation carried out in 1999, Dr Andrzej Elzanowski, head of Vertebrate Zoology at the Polish Zoology Institute, concluded that "there are no similar features between the jaw and palate in theropod dinosaurs and those in birds." 108

Compared to reptiles and other four-footed creatures, most of the bones in birds' skulls and rear legs are very different. 109

On the other hand, the ophthalmic nerves in all theropods extend around the skull together with certain other nerves. In birds, however, those same nerves pass through special holes in the front of the skull. Therefore, every stage of evolutionists' search for similarities has ended in disappointment.

Furthermore, a bird's facial structure bears absolutely no resemblance to any reptile's. Fish, reptiles, amphibians and all mammals open their mouths by lowering their jawbones. Their upper jaws are immobile, since they are a fixed part of their skulls. Instead of jaws, however, birds have beaks and, in contrast to other animals, they are able to raise the upper part of their beaks as well as lowering the bottom section.

Eggs

– Ignoring all the other insuperable differences, evolutionists have portrayed birds' and reptiles' eggs as evidence of a similarity between the two. Yet here, too, they present erroneous inferences based on biased interpretations. Insects, amphibians, many fish and a few mammals lay eggs in the same way. Yet the eggs of these different species are all different.

Bird eggs have a brittle shell, whereas the shell of reptile eggs is leathery. All birds lay eggs, but not all reptiles do. Some reptiles give birth to their young (lizards and rattlesnakes) like mammals. It is therefore impossible to arrive at a sound conclusion through the false inference that dinosaurs and birds lay eggs, and are therefore descended from one another.

In addition, because their backbone stretching back from their skulls consists of vertebrae, birds are called vertebrates. Counting their legs and wings, birds have four joints, for which reason they are known as four-footed (or tetrapods). After a bird's egg has been laid, the chick inside is nourished by a membrane system containing an amnion. For that reason, birds are also called amniotes (as are any other vertebrates with an amnion and corona during

embryological development, such as reptiles and mammals). 110 Birds are completely different from dinosaurs in terms of these characteristics.

Equilibrium System

Like all other living things, Allah has created birds in a flawless manner, which reveals itself in every detail. Their bodies have been specially created to prevent any possible imbalance during flight. To prevent the bird from tipping over forward when flying, its skull is very light. The average weight of any bird skull represents only 1% of its body weight.

The feathers in the wing and tail regions in particular endow the bird with a most effective system of balance. The symmetry in the distribution of the feathers helps establish this equilibrium. All these characteristics enable a peregrine falcon (falcon pereginus), for example, not to overbalance when swooping down onto its prey at a speed of 300 kilometers an hour (186.411 miles per hour).

CONCLUSION

None of these characteristics distinguishing birds from terrestrial vertebrates can have emerged through random mutations. Even if we hypothesize that one of these features did come into being through chance mutations—which is itself impossible—that feature will offer no advantage on its own. In the absence of an air-type lung, development of the metabolism that provides the high levels of energy necessary for flight will serve no purpose. On the contrary, the creature will suffocate, being unable to obtain sufficient oxygen. In the event that an air-type lung develops first, the creature will then absorb too much oxygen and will again suffer as a result.

Another impossibility stems from skeletal structure: even if the bird is in some way in possession of an air type lung plus the appropriate metabolism—an impossibility—it will still offer no advantage. No matter how strong a creature may be, it will be unable to take off without a skeletal structure relatively lighter than any terrestrial animal’s. As made clear earlier, formation of wings requires a totally different and flawless creation.

In his book Janus: A Summing Up, a criticism of the Darwinist theory of evolution, the famous author Arthur Koestler makes the following commentt:

Equally chilling is the idea that some ancestral reptiles became transformed into birds by the small, step-by-step changes caused by random mutations affecting different organs. In fact, one gets goose-pimples at the mere thought of the number of Monod's roulette wheels which must be kept spinning to produce the simultaneous transformation of scales into feathers, solid bones into hollow tubes, the outgrowth of air sacs into various parts of the body, the development of the shoulder muscles and bones to athletic proportions, and so forth. And this rewasting of bodily structure is accompanied by basic changes in the internal systems, including excretion. Birds . . . instead of diluting their nitrogenous waste in water, which is a heavy

ballast, they excrete it from the kidneys in a semi-solid state through the cloaca. Then there is also the little matter of the transition, by 'blind chance,' from the cold-blooded to the warm-blooded condition. There is no end to the specifications which have to be met to make our reptile airborne or to construct a camera eye out of living software. 111

All this leads us to the single conclusion that birds cannot have evolved from dinosaurs, because no mechanism could eliminate the enormous differences between the two groups. Even evolutionist scientists admit the truth of this evidence, which shows once again that the dino-bird hypothesis is simply a Darwinist myth.

THE FLAWLESS ENERGY CALCULATIONS IN BIRD FLIGHT

The way birds acquire propulsive force in flight is one of their most impressive aspects. A great many features of bird flight cannot be replicated technologically. A plane must maintain a rather high speed in order to remain in the air, but birds also make use of the air currents from their wing beats to fly more slowly. The bird wing acts like a propeller. Another function of the wing is to serve as a supporting surface. The high efficiency of this function still cannot be achieved by technological means.

One of the many problems that birds overcome during flight is energy consumption: According to the laws of physics, a specific level of energy is required for any physical, technological or biological process to take place. Migratory birds must store sufficient fat in their bodies to be able to undertake their long journeys. But since birds must also be as light as possible, they need to be free of all unnecessary weight. Thus there is an exquisite equilibrium in their fuel consumption, and in their flight speeds. If a bird flies more slowly, it will consume more energy to propel itself. If it moves too quickly, it will again expend more energy in order to overcome air resistance. Therefore, the bird can fly economically only when it attains the most appropriate speed for the least fuel consumption. Depending on the aerodynamic structure of its own body and wings, every species has its own optimal flight speed. For example, this is 45 kilometers (27.961 miles) per hour in an Aztec dove, and 41.6 km/h (25.849 mph) for a parakeet. Birds constantly maintain these optimal flight speeds to permit energy savings,1 but how they do so is still a mystery to ornithologists.

The fuel consumption of an American golden plover (Pluvialis dominica fulva), for example, requires a very delicate calculation. Plovers migrate from Alaska to Hawaii for the winter, flying non-stop over the ocean because there are no islands en route and unlike seabirds, they cannot rest on the water. They manage their 4,000-kilometer (2,485-mile) journey in 88 hours, beating their wings continuously 250,000 times. They use up 70 grams (0.154 pound) of their 200-gram (0.440 pound) body weight as fuel.

To obtain the necessary propulsive force and heat to be able to fly, this bird consumes an estimated 0.6% of its body weight every hour. This means that after 72 hours—81% of the duration of its journey, this bird will have consumed 70 grams (0.154 of a pound) of fat as fuel, which should send it falling into the sea 800 kilometers (497.096 miles) short of its destination. Yet plovers never face such a danger, because they fly in a V-shaped formation, thus enjoying a 23% energy saving. After 88 hours, they have 6.8 grams (0.0149 of a pound) of fat left.2 However, this remaining fat is not a surplus, but is kept as a reserve in case of emergency, such as when the wind blows from the wrong direction. And so, these birds undertake an exceptionally long journey with the minimum of fuel.

Professor Werner Gitt, director of the German Federal Physics and Technology Institute, expresses his admiration for this economical energy consumption :

The extremely low specific rate of fuel consumption, p=0.6% of its weight per hour, is all the more amazing when we compare it that of manmade aircraft which is many orders of magnitude greater (for a helicopter p=4 to 5%; and p= 12% for a jet plane). 3

Experts must make complex calculations to obtain these figures, but a bird cannot make such flawless calculations on its own behalf. Another factor here is that every incomplete flight will end in the plover's drowning. There can be no question of this ideal fuel consumption being learned by trial and error, nor of one bird's' experiences being handed on to later generations. Therefore, in order to carry out this potentially lethal journey, the plover must be able to make the entire flight from the moment it has learned to fly. It is of course impossible for a bird to know:

* Its destination and the shortest route to it,
* How far away that destination is,
* The speed at which it must fly,
* How much energy it must expend to fly that distance,
* How much fat it will have to store to accomplish it,
* That it needs to fly in a V formation with others to reduce the energy it consumes,
* That it must set aside a reserve of fat in case of adverse weather conditions.

No chance or unconscious mechanism can determine a bird's ideal flight formation or speed, nor how much stored energy it will need. That these creatures, lacking the ability to take decisions and judgment, fly with such a rational plan and calculated techniques can be explained by their possessing the ideally appropriate bodily structures: These birds behave according to the inspiration given them from the moment of their creation. They live out their lives through the commands and supervision of our Lord, the Creator of all things.

1. Werner Gitt, In the Beginning was Information, Master Books, March 15, 2006 p. 249.
2. Ibid., p. 251.
3. Ibid.

Compared with running and swimming, the speed achieved during flight is very high. For example, the fastest running cheetah manages 80 kilometers/hour (49.7 miles an hour). The fastest swimming fish, the sailfish, reaches a maximum of 10 kilometers/hour (6.2 miles an hour), while a hawk can attain up to 300 kilometers/hour (186.4 miles an hour) as it dives with its wings folded. (1) Moreover, in comparison with the distance traveled, the energy expended is far less than that in swimming or running. A cheetah, for instance, reaches its top speed in 3 seconds, but must expend a high level of energy to overcome inertia. Its internal body temperature reaches 40°C during this process. In terms of energy expended over distance traveled, therefore, birds have been created with an incomparably more efficient structure.

1. John Downer, Supernature, The Unseen Powers of Animals, Sterling Publishing Co., Inc., New York, 1999, ss. 114-117.

THE FOSSIL RECORD REFUTES EVOLUTION

Looking at the realm of fossils in particular, we encounter concrete evidence that evolution never took place. All living things appear suddenly in the fossil record, complete with all their unique physical structures, with no transitional ancestors at all... (For details, see Harun Yahya's The Evolution Deceit from Ta-Ha Publishers Ltd. 1999; and Darwinism Refuted, from Goodword Books, New Delhi, 2002.) Since their fossils have been very well preserved, birds offer particularly rich evidence refuting the claims of evolution.

Despite the wide-ranging scientific research of the last 160 years, no evidence to support Darwin's so-called theory of evolution has ever emerged. Indeed, many scientists—from Darwin down to the present—admit that had such a process actually taken place, there should be a great deal of evidence, but that none has ever come to light.

The molecular biologist Michael Denton has this to say:

If evolution had really taken place in the past, there ought to be multitudes of transitional forms preserved in the rocks. Instead, evolutionists have been able to cite only of handful of candidates out of the billions of known fossils. These are mainly the lung fishes, the mammal like reptiles, the archaeopteryx, the horses and—more recently—the so-called walking whales. When these are examined more closely, however, they don't fill the bill at all. Either they are out of place in geologic time or they are separate kinds in their own right or both. 1

According to the theory of evolution, millions of half-reptile, half-bird creatures should have existed. The differences between these two living groups and also among millions of others should have been bridged in stages by transitional species. Therefore, had any evolutionary process taken place, then at least some of these intermediate forms should have been fossilized and survived to the present. They should be far more numerous than those species alive today.

Yet despite all the intense efforts over the last century or so to find an intermediate form, not one of the desired fossils has been found. Some evolutionists make striking confessions on this subject. This is how Charles Darwin himself, who put forward the theory, described his despair on the subject of intermediate forms in his book, The Origin of Species:

Firstly, why, if species have descendent from other species by insensibly 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? 2

After Darwin, the intensive efforts to find intermediate forms all ended in disappointment. Though an evolutionist, the well-known paleontologist Derek W. Ager, admits that the fossil records is against evolution: “The point emerges that if we examine the fossil record in detail, we find–over and over again—not gradual evolution, but the sudden explosion of one group at the expense of another.” 3

Another paleontologist, Mark Czarnecki, admits that the fossil record is of such a kind as to support creation, not evolution:

. . . major problem in proving the theory (evolution theory) has been the fossil record. . . This record has never revealed traces of Darwin’s hypothetical intermediate variants—instead, species appear and disappear abruptly, and this anomaly has fueled the creationist argument that each species was created by Allah. 4

Also, most of the fossils proposed by evolutionists as evidence for evolution were later found to be either forgeries, or else were misinterpreted using biased or unscientific methods. (You shall see such distortions in the next chapter.) Today, evolutionists cannot point to a single fossil as evidence. Indeed, Mark Ridley, an University of Oxford zoologist and well-known evolutionist, admits:

In any case, no real evolutionist, whether gradualist or punctuationist, uses the fossil record as evidence in favour of the theory of evolution as opposed to special creation.5

1. Michael Denton, Evolution: A Theory in Crisis, London: Burnett Books, 1985, p. 368.
2. Charles Darwin, The Origin of Species, p. 205.
3. Derek A. Ager, “The Nature of the Fossil Record,” Proceedings of the British Geological Association, Vol. 87, 1976, p. 133.
4. Mark Czarnecki, “The Revival of the Creationist Crusade,” MacLean's, 19 January 1981, p. 56.
5. “Who Doubts Evolution?,” New Scientist, Vol. 90, 25 June 1981, p. 831.

ARCHAEOPTERYX IS AN EXTINCT SPECIES OF BIRD, NOT AN INTERMEDIATE FORM

After Darwin published The Origin of Species in 1859, the search began for intermediate forms to verify his claims. Darwinians regarded the first Archaeopteryx fossil, found in the Solnhofen Limestone in Bavaria in 1861, as evidence that would prove their theory valid. The skeleton of Archaeopteryx (which name, in Latin, means “wing left over from ancient times”) was placed in a bank vault for protection. The importance of this fossil, 30 centimeters (11.811 inches) in length, the size of a modern-day crow, stemmed from its features, which Darwinists alleged belonged to both birds and reptiles. With great excitement—and bias—they portrayed the fossil as an intermediate form. It took its place in many museum exhibitions and textbooks as definitive proof of evolution. Meanwhile, criticisms regarding the fossils, as well as the inconsistencies that emerged, were all ignored.

A number of features peculiar to Archaeopteryx led evolutionists to interpret it as a transitional species between reptiles and birds. It was suggested that this 150-million-year-old fossil bore the half-reptile characteristics of an extinct species that had lived long before birds. Archaeopteryx’s feathered claws on its arms, the teeth in its beak and bony, reptile-like tail led to its being interpreted as evidence of the theory of evolution. On account of the similarities, Thomas Huxley, one of Darwin’s supporters, first proposed in 1870 the idea that Archaeopteryx was descended from dinosaurs. 112

According to the theory of evolution, the forelegs of certain small dinosaurs called Velociraptors or Dromaeosaurs—a group of small and medium-sized carnivorous dinosaurs that lived 144 to 66.4 million years ago—had gradually developed into wings as the animals leaped onto their prey from high branches. Archaeopteryx was the first species to branch off from its alleged dinosaur ancestors and begin to fly. This scenario can be found in just about every evolutionist publication. In fact, however, recent examinations of other Archaeopteryx fossils have shown that this creature is very definitely no intermediate form, but merely an extinct species of bird with a few features that distinguish it from modern-day species. The scientific world today agrees that Archaeopteryx possessed a skeleton, feather structure and flight muscles identical to those of present-day birds. In addition, scientific examination has proved that with its breastbone 113 and asymmetric feather structure,114 Archaeopteryx was fully capable of flight. In contrast to general evolutionist claims, its possessing teeth does not indicate it to have been a dinosaur. 115

In short, Archaeopteryx cannot be called an intermediate form on the basis of a few unique features. In particular, the seventh Archaeopteryx fossil, found in 1992, totally demolished evolutionist claims based on its similarity to reptiles. The scientific writer Richard Milton touched on the invalidity of the claims regarding Archaeopteryx:

Although it is certain that Archaeopteryx is an important fossil, it is hard at this moment to say what that importance actually is. Even more importantly, it is impossible for Darwinists to suggest that it supports natural selection accompanied by a random mechanism of genetic mutation. Archaeopteryx constitutes no evidence for these mechanisms, because it is a completely isolated fossil in the fossil record with no known direct ancestor or lineage, just like Eohippus. 116

Since Archaeopteryx is acknowledged to not represent any intermediate form, many evolutionists today agree on the need for new evidence. Alan Feduccia expresses the erroneous nature of the evolutionist claims regarding Archaeopteryx:

Paleontologists have tried to turn Archaeopteryx into an earth-bounded, feathered dinosaur. But it's not. It is a bird, a perching bird. And no amount of "paleobabble" is going to change that. 117

Despite being an evolutionist, the Yale University professor of geology John H. Ostrom agrees that these claims lack proof:

Zdenek Burian re-organized pre-Archaeopteryx step in the evolution of bird flight which is usually named pro-avis. There is no fossil evidence of pro-avis at all. 118

Colin Patterson, another evolutionist scientist, also says that these claims are very far from being scientific:

Is Archaeopteryx the ancestor of all birds? Perhaps yes, perhaps no: there is no way of answering the question. It is easy enough to make up stories of how one form gave rise to another, and to find reasons why the stages should be favoured by natural selection. But such stories are not a part of science, for there is no way of putting them to the test. 119

For the reasons, which we shall examine in detail in due course, the thesis that Archaeopteryx was a primitive bird is false. Yet this fossil is of indispensable importance to Darwinists, not because it constitutes evidence for any process of evolution, but because it generates easy speculation. On every possible occasion, the fossil is brought up as if it represented significant evidence, despite the facts being proven time and again. No intermediate forms, the basic claim of the theory of evolution, have ever been found. The removal of Archaeopteryx, looked on as literally the only specimen that evolutionists imagined they could deploy, would deal the theory a severe blow. Therefore, the continued depiction of Archaeopteryx as evidence is a dogmatic, rather than scientific.

WHY ARCHAEOPTERYX IS NOT AN INTERMEDIATE FORM

Ever since the 19th century, evolutionists have been speculating about Archaeopteryx. The teeth in its mouth, the claw-like talons in its wings and long tail led to the fossil being compared to reptiles. Many evolutionists have described it as a "primitive bird" and have even claimed it is closer to reptiles than to birds. Yet in fact, this animal was definitely not an

intermediate form. On the contrary, its skeleton and feathers were ideally suited to flight. Those features compared to those of reptiles have also been found in birds that lived in the past, and even in other birds still living today.

Alan Feduccia, subscribes to this view and opposes the idea that Archaeopteryx is the primitive ancestor of birds:120 “Most recent workers who have studied various anatomical features of Archaeopteryx have found the creature to be much more birdlike than previously imagined. The resemblance of Archaeopteryx to theropod dinosaurs has been grossly overestimated.” 121

Archaeopteryx possesses a number of features that differ from those in modern birds, yet its characteristics show it to have been a true bird. The fact that Archaeopteryx possesses a number of unique features does not show it to be an intermediate form. The proofs that Archaeopteryx is merely an extinct species of bird—and not a half-dinosaur, half-bird—can be briefly summarized:

Archaeopteryx’s wishbone and the subsequently discovered breast bone:

Dinosaurs possess no clavicula, or wishbone, though Archaeopteryx, like all other birds, possesses a clavicula. The anatomist David Menton refers to its wishbone in these terms:

Archaeopteryx has a robust wishbone [furcula]. Some recent fascinating studies using moving X-rays of birds as they fly show how the shoulder girdle has to be flexible to cope with the incredible forces of the power-stroke in flight. You can actually see the wishbone flex with each wing-beat. 122

Until the 1990s, the fact that Archaeopteryx lacked a sternum, or breastbone, was viewed as the most important evidence that it could not fly. (The breastbone, to which are attached the muscles necessary for flight, is found in front of the rib cage. This bone exists in all modern birds, flying or flightless, and even in bats, mammals that belong to a completely different order.)

However, the seventh Archaeopteryx fossil, discovered in 1992, disproved this argument. That fossil did contain a sternum, which evolutionists had for so long imagined did not exist. 123 This newly discovered fossil was described in Nature magazine:

The recently discovered seventh specimen of 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. 124

Alan Feduccia comments:

In conclusion, the robust furcula of Archæopteryx would have provided a suitable point of origin for a well developed pectoralis muscle . . . thus the main evidence for Archæopteryx having been a terrestrial, cursorial predator is invalidated. There is nothing in the structure of the pectoral girdle of Archæopteryx that would preclude its having been a powered flier. 125

This discovery completely undermined any claims that Archaeopteryx was a flightless half-bird.

Archaeopteryx's feather structure

One of the most important evidence that Archaeopteryx was capable of perfect flight is the asymmetrical structure of its feathers, identical to those in modern birds. As the well-known paleontologist Carl O. Dunbar stated, "Because of its feathers, [Archaeopteryx is] distinctly to be classed as a bird."126 The paleontologist Robert Carroll issued the following statement:

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. . . . 127

Alan Feduccia also points to this asymmetric structure in stating that Archaeopteryx was a flying bird:

The significance of asymmetrical features is that they indicate the capability of flying; nonflying birds such as the ostrich and emu have symmetrical [feathered] wings. 128

After emphasizing the complexity in Archaeopteryx's feathers, the anatomist David Menton draws attention to the deceptive nature of some evolutionists' attempts to claim the animal was partly scaled:

. . . The feathers are not just simply applied to the surface of the bird. Where they are attached to bone by ligaments, we see tiny 'bumps.' So in Archaeopteryx, the primary and secondary wing feathers are attached to the 'hand' and ulna, respectively. And the feathers on the tail are actually minutely attached to each of the 20 vertebrae. There are also a lot of small feathers on the legs and body of this bird, and there is compelling evidence that the head was covered with feathers too. However, when you see pictures of Archaeopteryx or its imaginary ancestors, it's quite common for artists to show a scaly head. 129

On the basis of certain features in Archaeopteryx's feather structure, some evolutionists have claimed that the creature was a dinosaur that climbed into the trees and then glided down, or soon took off by beating its wings. In fact, however, Archaeopteryx had a perfect structure and asymmetrical feathers, as can be seen from all the remains it has left behind.

The shape, structure, and general proportions of Archaeopteryx's wings are identical to those of modern-day birds. The fact that its wing structure has remained unchanged for 150 million years, since the Jurassic period, in other birds shows that Archaeopteryx's wings were created for flight. Those who claim that Archaeopteryx was unable to fly cannot explain that asymmetric structure. 130

With its muscles and feathers ideally suited to flight, this was a full-fledged flying bird. No fossil of a half-reptile, half-bird that lived earlier has ever been unearthed. Therefore, with its structure so similar to that of modern-day birds, Archaeopteryx presents significant evidence against the theory of evolution.

The Claws in Archaeopteryx's wings

Evolutionists use these claws as evidence that Archaeopteryx is an intermediate form, that it evolved from dinosaurs. In fact, however, this feature shows no relationship between this creature and reptiles. Indeed, two modern-day birds, Touraco corythaix and Opisthocomus hoazin, have talons that they use to cling onto branches. These two species are full-fledged birds, with no reptilian characteristics. Therefore, the claim that the talons in the Archaeopteryx wing mean it's an intermediate form is invalid.

In 1983, specimens of several species with talons in their wings, belonging to nine separate bird families, were displayed in the British Natural History Museum. 131 Clawed wings do not, therefore, make Archaeopteryx an intermediate form, since this feature also belongs to some birds alive today.

The teeth in Archaeopteryx's jaw

One of the main "intermediate form" features that evolutionist biologists point to is the teeth in Archaeopteryx's jaw. But this does not actually show any relationship between this bird and earlier reptiles. Evolutionists are mistaken in suggesting that these teeth are a reptilian feature, because teeth are not a reptilian characteristic. Some modern-day reptiles have teeth, while others (such as turtles) do not. Even more importantly, Archaeopteryx was not the only toothed bird. Such birds are extinct today, but the fossil record contains a separate group of toothed birds that lived both at the same time as Archaeopteryx and afterwards—and indeed until recent times.

Dr. Carl Wieland comments:

Archaeopteryx was not the only fossil bird to have had grasping teeth. Some fossil birds had teeth, some didn't. But how can teeth prove a relationship to reptiles, when many reptiles don't have teeth? Crocodiles are really the only group of reptiles that consistently have very well-developed teeth. And of course, even some mammals have teeth and some don't. 132

One very important fact, often ignored, is that the dental structure of Archaeopteryx and other toothed birds is very different from that of dinosaurs. According to measurements carried by such well-known ornithologists as L. D. Martin, J. D. Stewart and K. N. Whetstone, the teeth in Archaeopteryx and other toothed birds have flat surfaces and have broad roots. Yet the tooth surfaces of theropod dinosaurs, alleged to be the ancestors of these birds, are serrated like saws, and their roots are narrow.133 Studies by such anatomists as S. Tarsitano, M. K. Hecht and A. D. Walker have revealed that some of the similarities suggested between Archaeopteryx and dinosaurs are entirely due to misinterpretation. 134

All this goes to show that Archaeopteryx was not an intermediate form, but merely belongs to a separate classification of toothed birds. Seeking to establish a relationship between this creature and theropod dinosaurs is highly unscientific.

Archaeopteryx's jawbone

It has been claimed that Archaeopteryx's jawbone resembles that of dinosaurs, but during examinations by Haubitz and his team, using computer tomography, revealed that its jawbone is in fact identical to those of modern birds.135 The movement of the jaw is another important piece of evidence that undermines evolutionist claims. In most vertebrates, including reptiles, only the lower jaw is mobile, while in birds, including Archaeopteryx, the upper jaw also moves.

Archaeopteryx's finger structure and wings

Another blow to the evolutionist thesis comes from Archaeopteryx's finger structure. Development of the forearm bones during the embryonic process is completely different in birds and theropod dinosaurs.

Theropod dinosaurs' "hands" develop from the first, second and third finger bones, and the wings of birds from the second, third and fourth finger bones. This is an important distinction between dinosaurs and birds, as was noted in a 1997 article in Science magazine:

In reality, there is no easy solution to this question of bird origins. . . . The problem for this view is the long evolutionary gap, with no convincing intermediates. What we need is a proto-Archaeopteryx find to complement the numerous post-Archaeopteryx finds that are now being made. But for the time being this important developmental evidence that birds have a II-III-IV digital formula, unlike the dinosaurs' I-II-III, is the most important barrier to belief in the dinosaur-origin orthodoxy. 136

J. Richard Hinchliffe, of the University of Wales Institute of Biological Sciences, reached this conclusion by using the modern isotopic technique on embryos. While birds' wings develop from the second, third and fourth fingers, those of theropod dinosaurs developed from the first, second and third. This is a major problem for those who maintain the relationship between Archaeopteryx and dinosaurs. 137

Hinchliffe's research and observations were reported in the same Science article:

Doubts about homology between theropod and bird digits remind us of some of the other problems in the "dinosaur-origin" hypothesis. These include the following:

- 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 relatively heavy dinosaurs.

- 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. 138

In addition, such well known ornithologists as L. D. Martin, J. D. Stewart and K. N. Whetstone compared the wrist bones of Archaeopteryx and dinosaurs and revealed that there was no similarity between them.139

During an interview, the anatomist David Menton responded to the question of whether Archaeopteryx's feet indicated that it was a terrestrial, running dinosaur:

No. Archaeopteryx, along with all perching birds, has what is called a grasping hallux, or hind toe, pointing backwards. Rearward-facing toes may be found in some of the dinosaurs, but not a true grasping hallux with curved claws for perching. 140

Archaeopteryx's skeletal structure

Interpretations that suggest Archaeopteryx's skeletal structure caused it to stoop forward —a characteristic of dinosaurs—are not confirmed by scientific findings. A. D. Walker has stated that interpretations along these lines are false and that Archaeopteryx's skeletal structure, like a bird's, predisposed it to lean backwards. 141

Dr. David refers to the avian skeletal structure:

There are also design similarities between reptiles, mammals and living birds too. Birds have a distinctive, specialized skeleton because, as one distinguished evolutionist who is also an ornithologist once said, "Birds are formed to fly." So was Archaeopteryx. 142

Archaeopteryx's balancing ability

"Early Bird Had the Brains to Fly", an article in the 6 August, 2004, edition of Scientific American, stated that Archaeopteryx possessed the special nervous system mechanisms needed for flight. When paleontologists discovered the first fossils belonging to this species in 1861, they were thought to represent evidence for the theory of evolution, which had been proposed less than a decade before. But scientific research gradually revealed that this claim was false.

Timothy B. Rowe from the University of Texas and his team began researching flight characteristics in a 147-million-year-old Archaeopteryx fossil. Their three-dimensional investigations of the skull, using X-ray imaging, revealed a well-developed visual center and inner ear canals closely resembled those of flying birds. These structures enable the balancing abilities that are essential for flight.

Lawrence M. Witmer of Ohio University says, "We used to think that [only]feathers made the bird," and goes on to say, "you have to put in a big computer to fly."143 Scientists using advanced techniques to study the Jurassic-period Archaeopteryx skull also stated in their research, published in Nature magazine, that Archaeopteryx's brain had similar structures for flight and balance as do modern-day birds—and that this 150-million-year-old bird could definitely fly. 144

In the words of Dr. Angela Milner from London's Natural History Museum, Archaeopteryx's brain is "identical" to that of birds. She reconstructed its skull's three-dimensional structure using computer tomography and the inner brain via computer. "We were fully expecting to find a dinosaur-like brain," she stated. "Instead, it was completely bird-like." Her study revealed that Archaeopteryx's brain structure was very close to that of modern flying birds. Its inner ear had well-developed canals used for balance, and larger optic lobes for vision. Both structures are utterly essential for efficient flight. Dr. Milner added: "The brain scan basically showed that the Archaeopteryx had all of the structures that allow birds to fly." 145

Incompatible timing

The most important evidence that Archaeopteryx cannot be a link between dinosaurs and birds is that theropod dinosaur fossils belong to a far later period than Archaeopteryx. The fossil dinosaurs claimed to be the ancestors of birds actually lived in the Cretaceous Period, some 75 million years after Archaeopteryx, showing that any such transition is purely imaginary.

This incompatible timing deals a lethal blow to evolutionist claims. In his book Icons of Evolution, the American biologist Jonathan Wells emphasizes that Archaeopteryx has literally become an emblem of evolution, even though all evidence clearly shows that the creature could not have been birds' primitive ancestor. According to Wells, one indication of this is that the theropod dinosaurs, depicted as the ancestors of Archaeopteryx, actually appear later in the fossil record. 146

Richard Hinchliffe of the University of Wales Institute of Biological Sciences touches on this subject in an article in Science magazine:

The most theropod dinosaurs and in particular, the birdlike dromaeosaurs are all very much later in the fossil record than Archæopteryx. 147

Another important proof that Archaeopteryx cannot be an intermediate form is the finding of fossilized bird fossils that lived close to it in time. All this shows that Archaeopteryx is not an intermediate form, but of a classification that can be termed toothed birds—and it is totally illogical to link this creature to theropod dinosaurs. In an article titled "Demise of the 'Birds are Dinosaurs' Theory," the American biologist Richard L. Deem says this about Archaeopteryx:

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, though its own hole. There is also the minor problem that the vast majority of the theropods appeared after the appearance of Archaeopteryx. 148

All this information proves that Archaeopteryx and birds resembling it are not intermediate forms. Fossils show that birds did not evolve from reptiles, or any other group. On the contrary, fossils prove that birds appeared suddenly, with all their unique features.

Conclusion

As you have seen, Archaeopteryx's manifest characteristics show that it was a bird. Furthermore, it has no features to prevent it from being very good at flying.149 That

Archaeopteryx's organs bear no similarity to those of theropod dinosaurs is reported in the magazine Science:

No dinosaur had an embryonic thumb, though all birds have them, on the feet they use for landing … All dinosaurs have saw-edged teeth, with razor-like molars. Confuciosornis (a 142-million-year-old bird fossil) has no teeth. Although Archaeopteryx has teeth, they are not saw-edged, but are arranged in rows like nails. There are two wide spaces at the back of all dinosaur skulls. Birds do not have these. There is no link between them at all, not even down to the finest detail. 150

All the scientific findings reveal that Archaeopteryx cannot have been an intermediate form between dinosaurs and birds, and also invalidate evolutionist claims on the subject. Dr. Michael Denton comments on why the Archaeopteryx is not an intermediate form and how evolutionists have distorted some of the bird's characteristics:

In Eichstátt, Germany, in 1984 there was a major meeting of scientists who specialize in bird evolution, the International Archaeopteryx Conference. They disagreed on just about anything that was covered there on this creature, but there was very broad agreement on the belief that Archaeopteryx was a true bird. . . Did that mean that really they didn't think it was a transitional pre-bird? . . . Well, it's kind of interesting that they found it necessary to draft the following statement. . . So you can see they were acutely aware that their deliberations might lead some to wonder whether, in fact, Archaeopteryx had anything to say about evolution, so they all did sign this. If, of course, it's a true bird, it is not the half-way, half-reptile, half-bird like we've often heard.151

In short, the thesis of bird evolution is not consistent with biological or paleontological evidence, but is a fictitious, unrealistic claim stemming from Darwinist preconceptions. The subject of bird evolution, which some experts speak of as if it were scientific fact, is a myth kept alive for philosophical reasons. The truth revealed by science is that the flawless creation in birds is the work of an infinite wisdom—that they were created by Almighty Allah.

THE FALSE FOSSIL ARCHAEORAPTOR: AN EXAMPLE OF EVOLUTIONIST FANATICISM

With the collapse of their claims about Archaeopteryx, evolutionists are at a complete dead-end regarding the origin of birds. According to their claims, the Earth's geological strata should contain a great many odd fossil creatures bearing the features of both reptiles and birds. Therefore, some evolutionists have set about creating their own alleged intermediate forms, which they have been unable to find elsewhere, by resorting to biased interpretations and distortions.

The half-dinosaur, half-bird fossils described as those of "dino-birds" introduced to the public in the 1990s, are a result of these endeavors. By publishing drawings of these so-called dino-birds, evolutionist media engaged in an international campaign of deception. Each of the so-called "intermediate form fossils" portrayed as evidence for Darwinism was put forward with misleading explanations, with no scientific reservations.

Subsequently, it emerged that this campaign was based on fraud and distortion. But how can world-famous scientific journals and television institutions turn biased interpretations of fossils into a propaganda vehicle? How can they portray falsehoods uttered in the name of science as "the greatest evidence for evolution"? The answers lie hidden in the evolutionist fanaticism of these media organizations.

Let us now examine some instances:

A HISTORIC EVOLUTIONIST FRAUD: ARCAEORAPTOR LIANINGENSIS

Archaeoraptor liaoningensis was a counterfeit dino-bird fossil alleged to be an intermediate form. The remains of this creature were discovered in the Chinese province of Liaoning. Later, scientists invited to analyze it raised doubts as to its authenticity. It was determined that the fossil—had been tampered with. Yet all this was ignored, and the fossil was bought on the Chinese black market for $80,000 by Stephen Czerkas, an American museum staffer with no scientific research to his name, and illegally smuggled out of China, as are so many other specimens.

Stephen Czerkas then applied to scientific journals to publish articles about the fossil. Two magazines he contacted, Nature and Science, stated they would not publish the report until initial examinations had been carried out under paleontological rules.

Czerkas was determined to have the fossil publicized, however, and ignored the objections, submitting it to National Geographic magazine, well-known for its support for the theory of evolution.

National Geographic was well aware that under Chinese law, it was illegal for the fossil to be taken out of the country, and fossil smuggling was declared a severe crime sometimes even punishable by death. 152 Even so, the magazine accepted the smuggled fossil and introduced it to the media at a press conference at the magazine's headquarters in October 1999. National Geographic used the seven-page report relating the dino-bird myth as its November 1999 cover story, suggesting that the claim that birds had evolved from dinosaurs now rested on concrete fossil evidence.

The author of the article, National Geographic writer Christopher P. Sloan, believed so strongly in his interpretation that he wrote: "we can now say that birds are theropods just as confidently as we say that humans are mammals."

This species, said to have lived 125 million years ago, was given the scientific name of Archaeoraptor liaoningensis. The fossil was put on display in the National Geographic's museum and depicted to visitors as evidence for evolution.

The University of Kansas paleontologist Larry Martin commented on the forced interpretation and biased nature of this feathered dinosaur by saying, "To the people who wrote the paper, the chicken would be a feathered dinosaur." 153

The claim that A. liaoningensis constituted a missing link between dinosaurs and birds turned into a scandal when it emerged in March 2001 that the fossil was a forgery. No such intermediate species as Archaeoraptor had ever existed. Computer tomographic scanning of the fossil revealed that it consisted of parts from at least two different species. Archaeoraptor had a reptile-like tail and a bird-like body, which had subsequently been expertly assembled together.

Archaeoraptor was thus removed from the scientific literature and placed alongside all the other evolutionist forgeries. Darwinism, unable to find any evidence for its claims for 150 years, had again resorted to deliberately manufactured fossils.

Many articles refer to Archaeoraptor and Piltdown Man in the same breath, but there is an important difference between these two fossil forgeries, the Piltdown Man skull was accepted by scientific circles in 1912 and spent the next 40 years being portrayed as evidence of human evolution, before being exposed as a fraud. The Archaeoraptor fossil did not get that far, because some scientists doubted it right from the outset—doubts that turned out to be correct.

This forgery was said to date as far back as the Cretaceous Period, 142 to 65.5 million years ago. This carnivore also had sharp claws and teeth. Its shoulder girdle and breastbones were identical to those of present-day birds, showing that it was capable of flight.

This totally feather-covered creature walked on two legs, its bones were hollow, and it had feathers and a long tail. Yet that tail had been taken from another fossil. In 1999, it finally emerged that this dino-bird fossil was a forgery, produced by adding a bird's skeleton to a reptile backbone: The long tail of a dromaeosaurid theropod dinosaur fossil had been added to the fossil of a bird about the size of a turkey. The fact is, however, that dinosaur and avian

characteristics had been deliberately combined in this fossil, created by the expert assembly of components belonging to five different living things. Chinese amateurs had made a dino-bird out of 88 bones using adhesives and various plasters. Earlier reports published under the captions like “Winged Dinosaur Found” and “Flying Dinosaur Unearthed” now gave way to “Dino-Bird Exposed” headlines. In a reference to the earlier Piltdown Man fraud, the well known magazine New Scientist began referring to the fossil as “the Piltdown Bird”! 154

On 29 March, 2001, an important admission appeared in a number of daily newspapers. The Turkish daily Hürriyet, for example, carried the story under the headline, “Dino-Bird Turns out to Be Nonsense”:

It has been realized that the animal described in scientific articles and declared in National Geographic magazine in November 1999 to be a missing link between dinosaurs and birds, is a forgery. It has emerged that the turkey-sized dino-bird skeleton known as Archaeoraptor liaonongensis was actually an assembly of bones from other animals. It was suggested that the dino-bird, assumed to shed light on an important gap in the theory of evolution, was 125 million years old and found in the Chinese province of Liaoning. Its feathered body looks like a bird, although its long, bony tail was reminiscent of carnivorous dinosaurs. An examination published in today’s edition of the British scientific weekly magazine Nature has revealed that the dino-bird is a fabrication. A group of researchers including three paleontologists proved the fabrication by means of computer tomography. The dino-bird was actually the work of Chinese smugglers . . . [who] smugglers constructed the dino-bird out of 88 bones using adhesives and plaster. The front of the Archaeoraptor belonged to a single bird, while the body and tail contained bones from four different species. Scanning of the dino-bird by computer indicated that the bird skeleton belonged to previously unknown species, and the dino part to new, small dinosaur species. 155

National Geographic, on the other hand, published only a very brief reference to this fabrication. This statement, by the vertebrate paleontologist Xu Xing of the Beijing Chinese Academy of Sciences, appeared in the “Forum” section, toward the back of the magazine. Xu Xing’s letter contained the following statements:

After observing a new feathered dromaeosaur specimen in a private collection and comparing it with the fossil known as Archaeoraptor, I have concluded that Archaeoraptor is a composite. The tail portions of the two fossils are identical, but other elements of the new specimen are very different from Archaeoraptor, in fact more closely resembling Sinornithosaurus. Though I do not want to believe it, Archaeoraptor appears to be composed of a dromaeosaur tail and a bird body. 156

In a statement in New Scientist, however, Xu Xing says: “The Archæoraptor is composed of a bird body and a dinosaur tail.”157 Larry Martin, the Kansas University expert on fossil birds, maintains that the Chinese farmers who first discovered the fossils stuck part of a dinosaur fossil onto a bird fossil: “Once you cut out the dinosaur part, it probably will be an interesting bird.”158 He also thinks that the portions of this fossil may be one of the oldest examples of modern birds.

Zhonghe Zhou and Fucheng Zhang of the Vertebrate Paleontology and Palaeoanthropology Institute in Beijing and Julia A. Clarke of New York's American Museum of Natural History carried out a study comparing the Archaeoraptor fossil with a prehistoric bird from the species Yanornis martini. According to the team's report, in terms of size and anatomy, this false fossil's forelegs, fingers and beak tip bore a close resemblance to the Yanornis martini bird fossil.

In short, Archaeoraptor was a fabrication, used by the press as propaganda for the theory of evolution. This forgery must also be regarded as an indication of evolutionists' despair. Not a single intermediate form fossil has been found for more than a century, and the huge morphological differences between fossils that belong to unique species have once again left evolutionists in a dead end.

As long as Darwinists refuse to face facts, they will continue to cling to a theory kept on its feet by fraud.

THE DELIBERATE IGNORING OF ARCHAEORAPTOR'S FRAUDULENT NATURE

Dr. Storrs L. Olson, director of the avian department of the famous Smithsonian Institute in the USA, stated that he had warned National Geographic beforehand that the Archaeoraptor liaoningensis fossil was a fake, but that the magazine's management had completely ignored him. These statements of Olson's appeared in an open letter to Peter Raven, a scientist called on the National Geographic staff:

In a statement to the newspaper USA Today, Olson said: "The problem is, at some point the fossil was known by Geographic to be a fake, and that information was not revealed." 160

1 November 1999

Dear Peter,

I thought that I should address to you the concerns expressed below because your committee is at least partly involved and because you are certainly now the most prominent scientist at the National Geographic Society.

With the publication of "Feathers for T. rex?" by Christopher P. Sloan in its November issue, National Geographic has reached an all-time low for engaging in sensationalistic, unsubstantiated, tabloid journalism. . . .

. . . This is the worst nightmare of many zoologists—that their chance to name a new organism will be inadvertently scooped by some witless journalist. Clearly, National Geographic is not receiving competent consultation in certain scientific matters.

Sloan's article explicitly states that the specimen in question is known to have been illegally exported and that "the Czerkases now plan to return it to China." In Washington, in

June of 1996, more than forty participants at the 4th International Meeting of the Society of Avian Paleontology and Evolution, held at the Smithsonian Institution, were signatories to a letter to the Director of the Chinese Academy of Sciences that deplored the illegal trade in fossils from China and encouraged the Chinese government to take further action to curb this exploitation.

. . . Thus, at least since mid-1996 it can hardly have been a secret to anyone in the scientific community or the commercial fossil business that fossils from Liaoning offered for sale outside of China are contraband.

Most, if not all, major natural history museums in the United States have policies in effect that prohibit their staff from accepting any specimens that were not legally collected and exported from the country of origin. The National Geographic Society has not only supported research on such material, but has sensationalized, and is now exhibiting, an admittedly illicit specimen that would have been morally, administratively, and perhaps legally, off-limits to researchers in reputable scientific institutions.

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.

The idea of feathered dinosaurs and the theropod origin of birds is being actively promulgated by a cadre of zealous scientists acting in concert with certain editors at Nature and National Geographic who themselves have become outspoken and highly biased proselytizers of the faith. Truth and careful scientific weighing of evidence have been among the first casualties in their program, which is now fast becoming one of the grander scientific hoaxes of our age—the paleontological equivalent of cold fusion. If Sloan's article is not the crescendo of this fantasia, it is difficult to imagine to what heights it can next be taken. But it is certain that when the folly has run its course and has been fully exposed, National Geographic will unfortunately play a prominent but unenviable role in the book that summarizes the whole sorry episode.

Sincerely,

Storrs L. Olson
Curator of Birds
National Museum of Natural History
Smithsonian Institution
Washington, DC 20560 159

In short, despite the realization that the fossil it portrayed to the entire world as evidence of evolution was a fake, National Geographic continued to portray it as evidence of evolution.

This deception exhibited by National Geographic is by no means the first carried out in the name of evolution. Ever since the theory was first proposed, a great many fabrications have been perpetrated to support the theory.

The German biologist Ernst Haeckel produced false embryo drawings in order to support Darwinism. British evolutionists mounted an orangutan jaw onto a human skull and displayed this for some 40 years at the Natural History Museum as "Piltdown Man—the Greatest Proof of Evolution."

American evolutionists declared a single pig's tooth to have come from Nebraska Man. All over the world, primitive creatures or ape-men that never existed have been depicted through illustrations or models billed as "reconstructions."

In light of all this, if Archaeoraptor is a fabrication, what about the other "dino-bird" fossils?

Following are extracts from an interview with Alan Feduccia published in the February 2003 edition of Discover magazine. Despite being an evolutionist, Feduccia states that the fossils discovered are not evidence of evolution and some people have resorted to fabrication:

Discover: Some recent dinosaur fossils from China have a downy, featherlike covering. Doesn't that prove a link between dinosaurs and birds?

FEDUCCIA: People have accepted that these filamentous structures—dino fuzz—represent proto-feathers. But these things do not resemble feathers, and I don't think they have

anything to do with feathers. To me, they look like preserved skin fibers. . . . You can transform bird scutes [the scales on birds' feet] into feathers with the application of bone morphogenic protein. So while people imagining models for the evolution of feathers feel that filaments must be an intermediate step between scales and feathers, you really don't need that stage. . . . When we see actual feathers preserved on specimens, we need to carefully determine if we are looking at secondarily flightless birds that have retained feathers and only superficially resemble dinosaurs, or if the specimens are in fact related to dinosaurs. That's a difficult issue to deal with right now, given the existence of fake fossils.

Discover: So far, only one feathered dinosaur, Archaeoraptor, has been publicly acknowledged as a forgery. You think there are others?

FEDUCCIA: Archaeoraptor is just the tip of the iceberg. There are scores of fake fossils out there, and they have cast a dark shadow over the whole field. When you go to these fossil shows, it's difficult to tell which ones are faked and which ones are not. I have heard that there is a fake-fossil factory in northeastern China, in Liaoning Province, near the deposits where many of these recent alleged feathered dinosaurs were found.

Journals like Nature don't require specimens to be authenticated, and the specimens immediately end up back in China, so nobody can examine them . . . there is no way to authenticate any of this stuff.

Discover: Why would anyone fake a fossil?

FEDUCCIA: Money! The Chinese fossil trade has become a big business. These fossil forgeries have been sold on the black market for years now, for huge sums of money. Anyone who can produce a good fake stands to profit.

Discover: If there are good reasons to be skeptical, why are you perceived as being on the scientific fringe?

FEDUCCIA: The idea of being able to watch living dinosaurs by looking out at the birds in your backyard bird feeder is very appealing. The popular press naturally jumped all over it. It's also a money game. Many museums have promoted the idea of birds being living dinosaurs, and they have spent huge amounts of money on exhibits about that link. Plus, some paleontologists have spent three decades saying that birds evolved from dinosaurs, so there are careers at stake.

Discover: Is there anything that would convince you birds really did evolve from dinosaurs?

FEDUCCIA: At the time period when birds are thought to have evolved, there are plenty of theropod dinosaurs, but they do not have the key birdlike features.

Discover: How did you get involved in the debate in the first place?

FEDUCCIA: I really was not interested in the origin of birds until I wrote a book called The Age of Birds back in 1980, for which I had to write a chapter on bird origins. I tried to be as fair as possible, but when I did not come down firmly on the side of the dinosaurian origin of birds, I was viewed as a heretic . . .

If these researchers were so convinced that they were right, why did it make a difference what I thought? Why did they get so enraged? As the years progressed, I started looking into the problem of the origin of birds in great detail, and everywhere I looked, it was as if we were being asked to put a square peg in a round hole. 161

Even if dino-bird fossils are not forgeries, there is still significant evidence that the structures in them depicted as feathers have nothing to do with real bird feathers—as you'll see in the pages that follow. The subject of fabricated fossils also appeared in the British magazine New Scientist:

Most of the beautiful Chinese fossil birds on sale have been embellished in one way or another. Some may be assembled from broken pieces of several fossils, while others have had missing features added. "Almost every one that I've seen on the commercial market has some reconstruction to make it look prettier," says Kraig Derstler, a palaeontologist at the University of New Orleans in Louisiana.

Many early palaeontologists saw nothing wrong with adding a missing bone or two. Both the American Museum of Natural History and the Carnegie Museum in Pittsburgh acquired fossil skeletons of Apatosaurus with skulls from different dinosaurs in the 1880s. But the prices that well-preserved Chinese bird fossils fetch have made faking extremely profitable. Over the past twenty years, says Derstler, "adhesives and fake rock have become very easy to make and very difficult to spot."

The problems start with the Chinese peasants who dig up to make a fortune from fossils. 162

The next part of the report refers to how some composites, or combined fossils, were made with such expertise as to deceive even the experts:

The paleontologist Luis Chiappe, of the natural History Museum of Los Angeles County, describes how one such specimen almost fooled him, till he noticed that one leg was longer than the other. "I wasn't sure what was wrong with it." Chiappe said. Only close examination revealed that two slabs had been mortared together. "On the surface, you really couldn't see that." Dr. Larry Martin of the University of Kansas, commented, "I don't trust any of these specimens until I see X-rays." 163

Larry Martin describes the Chinese attitude regarding these forgeries:

The farmers do not believe this is wrong, they look at it as restoring an art object to make it more marketable. The whole commercial market for fossils has gotten riddled with fakery. 164

The well-known Beijing paleontologist Xu Xing sets out the facts determining that the Archaeoraptor is a fabrication:

“Lots of specimens have been smuggled out for commercial purposes,” Xu said. For science, this is a disaster. When pieces are stolen and smuggled out, sometimes blocks of fossils are matched together mistakenly. That can be a big mistake, and it misleads the public. 165

The problem regarding fossils in China is even more serious, with smuggling out of the country continuing despite official security measures.166 Secretly unearthed specimens pass through many hands and are subsequently restored with adhesives made of earth and stone, in order to replace the missing parts, by people of limited means in America, Italy and Germany. Kraig Derstler of New Orleans University in Louisiana says, “You can't spot it without a microscope, or ultraviolet or X-rays.” 167

The approximately 142-million-year-old Confuciusornis fossil was first seen by a seller, rather than by a member of a museum or university—which indicates the value of fossils kept in private collections. As public interest in paleontology has arisen, so has a fossil market turned into an industry worth millions of dollars. Smugglers buy or steal fossils from China, Russia, Australia and other places, and then sell them to wealthy collectors in the West. Well-protected or rare fossil specimens have been targeted for theft in the same way as famous paintingres. In recent years, thousands of dinosaur eggs and more than 100 “bird” fossils have been sold on the international market.

For these reasons, the ever-growing trade in fossils represents a serious problem for scientists. Information about the strata where fossils are discovered is constantly being lost because of smuggling. Scientists are also unable to examine research on specimens in private hands, which represents a separate problem. 168

The dino-bird furore has been going on ever since the 1990s and rests on just such a deceptive foundation. Since there is no evidence to support the thesis that birds evolved from dinosaurs, the manufacture and selling of false evidence has become a profitable business, portraying products of commercial fraud as scientific evidence.

The eminent ornithologist Alan Feduccia has the last word:

“All in all, I find the whole dino-bird business a total hoax.” 169

IMAGINARY DINOSAUR-BIRD LINKS

As you saw in earlier chapters, it's impossible for birds to have evolved from dinosaurs, since no mechanism can have eliminated the enormous physiological differences between the two groups. Despite this, evolutionists still raise the scenario of birds being evolved from dinosaurs in various ways. They frequently resort to news reports, using pictures of reconstructions and sensational headlines regarding these so-called dino-birds, as if they represented the true facts. These accounts are intended to convince people feathered dinosaurs once lived on Earth.

This scenario is presented persistently as it were a proven fact. All objections, criticisms and counter-evidence are totally ignored, clearly indicating that this is deliberate propaganda intended to impose dino-bird myths on society. The biased fossil interpretations we shall examine in the following pages reveal their hollow, deceptive nature.

The claim that birds evolved from dinosaurs is actually opposed by a great many paleontologists or anatomists who otherwise support the theory of evolution. As you have seen, two renowned ornithologists, Alan Feduccia and Larry Martin, think this scenario is completely erroneous. This is set out in the textbook Developmental Biology, taught in U.S. universities:

Not all biologists believe that birds are dinosaurs. . . This group of scientists emphasize the differences between dinosaurs and birds, claiming that the differences are too great for the birds to have evolved from earlier dinosaurs. Alan Feduccia, and Larry Martin, for instance, contend that birds could not have evolved from any known group of dinosaurs. They argue against some of the most important cladistic data and support their claim from developmental biology and biomechanics. 170

Many evolutionist publications refer to the thesis that birds evolved from dinosaurs as if it were based on solid evidence and accepted by the entire scientific community. They try to give the impression that the only subject up for debate is which species of dinosaur birds evolved from. Although Martin earlier supported the dino-bird claim, he eventually realized in the light of his research that it was invalid, and abandoned his former ideas:

Every time I look at the evidence formerly discovered and then make a claim about the origins of the theropod, I saw its inaccuracy. That is because everything shows its inadequacy. The truth of the matter is that…I seriously suspect that they have the same features with birds and don't think that there exist striking features supporting that birds are of theropod origin. 171

Feduccia admits that concerning the origin of birds, the theory of evolution finds itself in a state of uncertainty. He attaches no credence to the deliberately maintained dino-bird controversy, which is in fact groundless. Important information is contained in his article, "Birds Are Dinosaurs: Simple Answer to a Complex Problem," published in October 2002 in The Auk, the journal of the American Ornithologists' Union, in which the most technical aspects of ornithology are discussed. Feduccia describes in detail how the idea that birds

evolved from dinosaurs, raised by John Ostrom in the 1970s and fiercely defended ever since, lacks any scientific evidence, and how such an evolution is impossible.

Feduccia is not alone among evolutionists in this regard. Peter Dodson, the evolutionist professor of anatomy from Pennsylvania University, also doubts that birds evolved from theropod dinosaurs:

I am on record as opposing cladistics and catastrophic extinction of dinosaurs; I am tepid on endothermic dinosaurs; I am skeptical about the theropod ancestry of birds. 172

Despite being an evolutionist, Dodson admits the unrealistic claims of the theory of evolution, and has come in for severe criticism from his evolutionist colleagues. In one article, he responds to these criticisms:

Personally, I continue to find it problematic that the most birdlike maniraptoran theropods are found 25 to 75 million years after the origin of birds . . . . Ghost lineages are frankly a contrived solution, a deus ex machina required by the cladistic method. Of course, it is admitted that late Cretaceous maniraptorans are not the actual ancestors of birds, only "sister taxa." Are we being asked to believe that a group of highly derived, rapidly evolving maniraptorans in the Jurassic gave rise to birds, as manifested by Archaeopteryx, and then this highly progressive lineage then went into a state of evolutionary stasis and persisted unchanged in essential characters for millions of years? Or are actual ancestors far more basal in morphology and harder to classify? If the latter, then why insist that the problem is now solved? 173

Alan Feduccia sets out an important fact concerning the dino-birds said to have been found in China: the "feathers" on the fossils said to be those of feathered dinosaurs are definitely not bird feathers. A considerable body of evidence shows that these fossil traces have nothing at all to do with bird feathers. He says this in an article published in The Auk magazine:

Having studied most of the specimens said to sport protofeathers, I, and many others, do not find any credible evidence that those structures represent protofeathers. Many Chinese fossils have that strange halo of what has become known as dino-fuzz, but although that material has been "homologized" with avian feathers, the arguments are far less than convincing. 174

Citing Richard O. Prum, one of the supporters of the dino-bird claims, as an example, Feduccia goes on to mention the prejudiced approach so prevalent on the subject:

Prum's view is shared by many paleontologists: birds are dinosaurs; therefore, any filamentous material preserved in dromaeosaurs must represent protofeathers. 175

According to Feduccia, one factor that invalidates this preconception is the presence of these same traces in fossils that have no relationship with birds:

Most important, "dino-fuzz" is now being discovered in a number of taxa, some unpublished, but particularly in a Chinese pterosaur and a therizinosaur, which has teeth like those of prosauropods. Most surprisingly, skin fibers very closely resembling dino-fuzz have been discovered in a Jurassic ichthyosaur and described in detail. Some of those branched fibers are exceptionally close in morphology to the so-called branched protofeathers ("Prum

Protofeathers”") described by Xu. That these so-called protofeathers have a widespread distribution in archosaurs is evidence alone that they have nothing to do with feathers. 176

Feduccia recalls that various structures found around these fossils and thought to belong to them, were later determined to consist of inorganic matter:

One is reminded of the famous fernlike markings on the Solnhofen fossils known as dendrites. Despite their plantlike outlines, these features are now known to be inorganic structures caused by a solution of manganese from within the beds that reprecipitated as oxides along cracks or along bones of fossils. 177

The fossil beds preserve not only an indefinite structure such as dino-fuzz but also bird feathers. But all the fossils presented as feathered dinosaurs have been found in China. Why should these fossils have not emerged from anywhere else in the world—Feduccia draws attention to this intriguing state of affairs:

One must explain also why all theropods and other dinosaurs discovered in other deposits where integument is preserved exhibit no dino-fuzz, but true reptilian skin, devoid of any featherlike material (Feduccia 1999), and why typically Chinese dromaeosaurs preserving dino-fuzz do not normally preserve feathers, when a hardened rachis, if present, would be more easily preserved. 178

Feduccia states that some of these creatures portrayed as feathered dinosaurs are simply extinct reptiles with dino-fuzz and that others are genuine birds:

There are clearly two different taphonomic phenomena in the early Cretaceous lacustrine deposits of the Yixian and Jiufotang formations of China, one preserving dino-fuzz filaments, as in the first discovered, so-called “feathered dinosaur” Sinosauropteryx (a compsognathid), and one preserving actual avian feathers, as in the feathered dinosaurs that were featured on the cover of Nature, but which turned out to be secondarily flightless birds. 179

Peter Dodson, on the other hand, says, “I hasten to add that none of the known small theropods, including Deinonychus, Dromaeosaurus, Velociraptor, Unenlagia, nor Sinosauropteryx, Protarcheaeopteryx, nor Caudipteryx is itself relevant to the origin of birds.”180 He means that these creatures cannot be the ancestors of birds because the earliest known bird, Archaeopteryx, lived long before the Cretaceous Period.

In short, the fossils portrayed as feathered dinosaurs or dino-birds either belong to certain flightless birds like today’s ostriches, or else to reptiles possessed of a structure known as dino-fuzz which has nothing to do with actual feathers. There exists not a single fossil that might represent an intermediate form between birds and reptiles. Therefore, the claim that fossils prove that birds descended from dinosaurs is completely unrealistic.

1) THE ALLEGED INTERMEDIATE FORM: MONONYCHUS

One of the best-known fossils in the alleged dino-bird chain is Mononychus, discovered in Mongolia in 1993 and claimed to be an intermediate form between dinosaurs and birds. Although not the slightest trace of feathers was found in this fossil, Time magazine

reconstructed the creature with feathers on the cover of its 26 April, 1993 issue. Subsequent evidence revealed that Mononychus was no bird but a fossorial (digging) theropod.

The fact that this fossil had a bird-like breastbone and wrist bones led evolutionists to interpret Mononychus as an intermediate form. Biased interpretations and support from the media gave the impression that some proof existed to back this up. However, the anatomical features depicted as evidence are also found in other animals, such as moles. These inferences represent no evidence at all and they have only led to misinterpretations.

Writing to Science News, Richard Monastersky reports, based on observations, why this fossil cannot be classified;

Mongolian and U.S. researchers have found a 75-million-year-old bird-like creature with a hand so strange it has left paleontologists grasping for an explanation. . . Paul Sereno of the University of Chicago notes that Mononychus had arms built much like those of digging animals. Because moles and other diggers have keeled sternums and wrists reminiscent of birds, the classification of Mononychus becomes difficult.181

In addition, this fossil is at least 80 million years younger than Archaeopteryx—which totally undermines any proposed

2 BAMBIRAPTOR FEINBERGI, DEPICTED WITH IMAGINARY FEATHERS

In 1994, another dino-bird claim was made on behalf of a fossil called Bambiraptor feinbergi, estimated to be 75 million years old. Found in the Glacier National Park in northern Montana, the fossil is 95% complete. Evolutionists promptly claimed that it represents an intermediate form between dinosaurs and birds. When the fossil, belonging to a dinosaur, was introduced as an alleged dino-bird, the report admitted, “Feathers, however, have not yet been found.”182 Despite this reservation, the media drew the animal as a feathered creature, and the missing details were added using plenty of creative imagination.

The most evident objection to this so-called missing link is again, an error in dating. This alleged intermediate form fossil is 75 million years younger than Archaeopteryx, itself a species of flying bird. This fossil is therefore a specimen that demolished the ancestral relationship claimed by evolutionists. In the same way that this fossil provides no evidence for evolution, it also demolished the ancestral relationship claimed by evolutionists. According to Ohio University professor of zoology John Ruben:

A point that too many people always ignored, however, is that the most birdlike of the dinosaurs, such as Bambiraptor and Velociraptor, lived 70 million years after the earliest bird, Archaeopteryx. So you have birds flying before the evolution of the first birdlike dinosaurs. We now question very strongly whether there were any feathered dinosaurs at all. What have been called feathered dinosaurs were probably flightless birds. 183

Evolutionists use a few bird-like characteristics as grounds for their preconceived interpretations. Yet the effort of building a line of descent based on similarities is full of contradictions that evolutionists cannot explain. Whenever evolutionists construct an alleged evolutionary relationship between clearly different living things based on similar structures,

they immediately close the subject by describing it as “parallel evolution.” They claim that living things with similar complex organs but with no ancestors in common, evolved independently. However, since they cannot account for the origin of these complex organs in even one living thing, their statements that these organs supposedly evolved several times presents a serious predicament.

Alan Feduccia states that certain similarities between birds and dinosaurs do not show any evolutionary relationship between the two groups:

Bambiraptor is a small dinosaur, but it does have a number of birdlike features, as do many other forms. However there is nothing special about hollow bones, as some mammals and frogs have them. The problem, of course, is that Bambiraptor is some 80 million years beyond Archaeopteryx, and yet is claimed to be the dinosaur most close to bird ancestry. That alone should be a red flag, and a warning that the situation is far more complicated than suspected. 184

3 CONFUCIUSORNIS SANCTUS: IDENTICAL TO MODERN BIRDS

Two paleontologists, Lianhai Hou and Zhonghe Zhou, researching at the Vertebrate Paleontology Institute in China in 1995, discovered a new species of fossilized bird, which they named Confuciusornis sanctus. This was presented to the public as the earliest flying dinosaur, even as evidence for how hands used for grasping turned into hands used for flight. According to Alan Feduccia, however, this fossil is one of the frequently encountered beaked birds. This one had no teeth, and its beak and feathers share the same features as present-day birds. There are claws on its wings, as with Archaeopteryx, and its skeletal structure is identical to those of modern-day birds. A structure known as the pygostyle, which supports the tail feathers, can also be seen.

In short, evolutionists regarded this fossil as a semi-reptile, the earliest ancestor of all birds, of a similar age (about 142 million years) as Archaeopteryx and, bearing a close resemblance to present-day birds. This clearly conflicts with the evolutionist theses that Archaeopteryx is the earliest ancestor of all birds. 185

This is also definitive proof that Archaeopteryx and other archaic birds are not intermediate forms. These and similar fossils show no evidence that different bird species evolved from earlier ones. On the contrary, it proves that present-day birds and certain unique bird species similar to Archaeopteryx lived at the same time. Some of these species, such as Confuciusornis and Archaeopteryx, are extinct, but a few have survived to the present day.

4 PROTARCHAEOPTERYX ROBUSTA AND CAUDIPTERYX ZOUI: VEHICLES FOR BIASED INTERPRETATIONS

In the summer of 1996, farmers working in the Yixian Formation found three separate turkey-sized fossils, so well preserved as to give genuine evidence of bird feathers. At first, Ji Qiang and his colleague Ji Shu-An concluded that these fossils must belong to a single species.

Noting their surprising similarity to Archaeopteryx, they gave the creature the name Protarchaeopteryx robusta.

During his research in the autumn of 1997, Philip Currie concluded that these fossils belonged to two different species, neither of which resembled Archaeopteryx. The second species was given the name Caudipteryx zoui. 186

The discoveries of the Protarchæopteryx robusta and Caudipteryx zoui fossils were depicted as evidence that birds evolved from theropod dinosaurs. 187 The popular press stated that these fossils were definitely the so-called ancestors of birds. One commentator even wrote that the dinosaur-bird link was "now pretty close to rock solid."188 However, this certainty was again, only a biased interpretation.

According to evolutionist claims, Caudipteryx and Protarchaeopteryx were small dinosaurs whose bodies were largely covered in feathers. But on their wings and tails were longer and more complex feathers, arranged like those in present-day birds. However, it is no surprise that these creatures should have feather arrangements similar to modern birds', because their feathers are symmetrically shaped, as observed in present-day flightless birds.189 Therefore, the creatures in question are flightless birds, not dinosaurs.

In severely criticizing the dino-bird dogma, Larry Martin and Alan Feduccia stated that these fossils were flightless bird species like the modern ostrich. 190

But adherents of the dino-bird theory are reluctant to accept this because they want to classify the creatures as dinosaurs, even though this fossil provides no support for evolutionist claims. Indeed, this fossil represents a new contradiction to evolutionists' alleged ancestral relationships.

According to the evolutionist scenario, these dinosaurs and modern birds both have a special bone that lets them bend their wrists. Again according to evolutionist claims, this feature enabled them to move their forefeet in a wide manner, to catch fleeing prey with their long arms and gripping talons. This allegedly powerful beating movement represented an important part of the wingbeats the today's birds use to fly. However, such interpretations are scientifically invalid, because flight consists of far more complex actions than just wing beating:

Any forward beating movement gives rises to a counter impulse that propels the bird backward. For the purpose of flight, the main flight feathers are arranged at such an angle as to push the air back and propel the birds forwards. As in planes, the wings have a special aerofoil shape, which causes air to flow faster over the upper surface than the lower. This, according to the Bernoulli principle, reduces air pressure on the upper surface and creates lift. This is the main factor in take-off, but there is also the question of Newton's Third Law—the reaction to the air being propelled downward.). 191

In addition, the structure of a wing hypothesized to catch prey is very different from that created for beating in flight. A feathered wing is no advantage to a bird using its wings to catch prey, because a feathered wing's broad surface will only increase air resistance and make movement more difficult. If, the bird flapped for hunting, as evolutionists maintain then its wing structure should help the bird move forward by pushing air back. Therefore, it would be a

greater advantage for the bird's wings to let air pass through them, like a sieve or flyswatter. Thus evolutionist accounts are full of illogicalities that conflict with their own claims.

In addition to its feathers, Caudipteryx has a series of other features showing it to be a bird—such as that it was carnivorous. Caudopteryx was portrayed as a theropod since it was first unearthed, it was thought to be a carnivore.192 But there were no teeth in its lower skull and lower jaw, and the first two fossil specimens contained the remains of crops that birds use for digesting plant materials.193 Organs such as the crop are found only in birds and not in any species of the theropod family. 194

Protarchæopteryx and Caudipteryx are therefore extinct birds. The only reason they are referred to as dinosaurs is because that's what evolutionists want them to be.

5 SINOSAUROPTERYX: ANOTHER FOSSIL SUBJECTED TO SPECULATIVE CLAIMS

With every new fossil discovery, evolutionists speculate about the dinosaur-bird link. Every time, however, their claims are refuted as a result of detailed analyses.

One example of such dino-bird claims was Sinosauropteryx, announced with enormous media propaganda in 1996. Some evolutionist paleontologists maintained that this fossil reptile possessed bird feathers. The following year, however, examinations revealed that these structures so excitedly described as feathers were actually nothing of the sort.

One article published in Science magazine, "Plucking the Feathered Dinosaur," stated that the structures had been misperceived as feathers by evolutionist paleontologists:

Exactly 1 year ago, paleontologists were abuzz about photos of a so-called "feathered dinosaur" . . . 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. . . . Larry Martin of Kansas University, Lawrence, thinks the structures are frayed collagenous fibers beneath the skin—and so have nothing to do with birds. 195

About the speculative claims regarding feathers and Sinosauropteryx, Alan Brush of Connecticut University had this to say:

The stiff, bristlelike fibers that outline the fossils lack the detailed organization seen in modern feathers. 196

Another important point is that Sinosauropteryx had bellows-like lungs, like those in reptiles. According to many researchers, these show that the animal could not have evolved into modern-day birds with their high-performance lungs.

Today's evolutionists have entirely abandoned their claim that the creature was feathered. But a dogmatic approach towards evolution and accepted preconceptions make such errors inevitable.

6 EOALULAVIS HOYASI SHARES WITH WING STRUCTURE OF MODERN-DAY BIRDS

Another fossil to demolish evolutionist claims was Eoalulavis hoyasi. This, estimated at some 120 million years old, is older than all the known theropod specimens. Nonetheless, wing structure in Eoalulavis hoyasi is identical to some modern-day flying birds. This proves that vertebrates identical in many respects to modern birds were flying 120 million years ago.197 Any suggestion that theropods, which appeared after this creature, were the ancestors of birds is clearly irrational.

This bird's wing has a bunch of small feathers attached to the "finger." Recognizable as the alula, this structure is a basic feature of many birds alive today and consisting of several feathers that permits the bird to engage in various maneuvers during flight. But it had never before been encountered in a fossil bird from the Mesozoic. This new bird was given the name Eoalulavis hoyasi, or "ancient bird with an alula."198 Its presence shows that this bird, the size of a chaffinch, was able to fly and maneuver as well as modern-day birds.

The alula functions like the wing flap on an airplane. When the bird wants to reduce its speed or landing, it increases of its wing to the horizon. The drag produced by this wing position helps the bird to slow down. But when the angle between the direction of the air flow and the wing surface gets too steep, turbulence over the wing increases until the bird loses the lift necessary to maintain flight. Like an airplane under similar circumstances, the bird is in danger of stalling in midair. The alula now enters the equation. By raising this small appendage, the bird creates a slot between it and the main part of the wing, similar to what happens when a pilot deploys a craft's wing flaps. The slot allows air to stream over the main wing's upper surface, easing turbulence and allowing the bird (or plane) to brake without stalling. 199

Birds 120 million years ago were using the same technology as that employed present. This realization added yet another insuperable difficulty facing the theory of evolution.

7 UNENLAGIA COMAHUENSIS: A DINO-BIRD BASED ON ARTISTS' IMAGINATIONS

Fernando E. Novas of the Argentine Museum of Natural Sciences in Buenos Aires and Pablo F. Puerta of the Paleontology Museum in Trelew announced a new fossil, said to be 90 million years old, in the 22 May, 1997, edition of Nature magazine, under the caption "Missing Link."200 They named this fossil Unenlagia comahuensis, meaning "half-bird from north-west Patagonia." This fossil, discovered in Argentina's Patagonia region, consisted of more than 20 pieces of the creatures leg, rib and shoulder bones. Based on these fragments, artists drew a creature complete with a neck, jaw and tail—and subsequently announced that this fossil was an intermediate stage in the transition from dinosaurs to birds.

However, Unenlagia comahuensis is manifestly a dinosaur, in many respects. In particular, certain features of its skull and the bone formations behind its eyes closely resemble those of theropods. There is also no evidence at all that it bore feathers. Evolutionist scientists, however, claimed that by raising its forearms, it could make similar movements to those used

by birds for flying. But clearly, these prejudiced guesses and assumptions cannot be regarded as definitive proof.

On account of its different features, Lawrence M. Witmer of Ohio University describes this creature as a genuine “mosaic”. 201

Alan Feduccia also states that Unenlagia comahuensis cannot be a missing link between dinosaurs and birds, emphasizing that it lived 55 million years after Archaeopteryx. 202

As Feduccia stressed in a 1996 article written together with several other authors in Science magazine, almost every dinosaur said to resemble the bird dates back to long after the emergence of the first true birds.203 This creates the problem that scientists refer to as the time paradox.

8 DROMAEOSUAR: THE DINOSAUR THAT EVOLUTIONISTS WERE DETERMINED TO MAKE THE ANCESTOR OF BIRDS

When the Archaeoraptor fossil, regarded as the ancestor of birds, was unmasked, evolutionists next placed their hopes in a discovered fossil newly discovered in China and named Dromaeosaur. Thought to have certain bird-like characteristics, it was proposed as the ancestor of birds.

In fact, however, this fossil was a typical reptile. It had no wings, and its forearms were clawed. It had long rear legs and a long tail. Evolutionists sought to link the creature to birds only because of the structures resembling feathers on the upper part of its body.

Yet as Feduccia stated, these structures, present in all so-called feathered dinosaurs, are actually the dino-fuzz that results from the gradual breakdown and fragmentation of the skin. For evolutionists to claim that reptiles evolved into birds, there should be fossils from reptiles that lived before Archaeopteryx and which gradually developed bird-like characteristics. Yet there is not the slightest evidence of this.

9 JEHOLORNIS PRIMA

Zhonghe Zhou, a Beijing researcher into paleoanthropology from the Vertebrate Paleontology Institute, and Fucheng Zhang discovered a fossil they named Jeholornis prima. This fossil bird’s long tail led some evolutionists to point to it as evidence that birds were evolved from dinosaurs. But as we already pointed out, mosaic creatures have features belonging to different living groups, which species evolutionists propose as evidence for their theory.204 Insects, birds, and bats all have wings, yet even evolutionists can not suggest any evolutionary link between them. Therefore, certain similarities between dinosaurs and reptiles do not imply that the former are the ancestors of the latter.

As Alan Feduccia says:

If one views a chicken skeleton and a dinosaur skeleton through binoculars, they appear similar, but close and detailed examination reveals many differences. . . . 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. 205

From that point of view, Jeholornis is not an intermediate form, but a fully fledged and powerful bird, albeit displaying mosaic features. 206

10 PROTOPTERYX FENGNINGENSIS

This fossil bird called Protopteryx fengningensis was discovered among 120-million-year-old Cretaceous strata in the Hebei region of China. In the 8 December, 2000, edition of Science magazine, paleontologists Fucheng Zhang and Zhonghe Zhou, from the Chinese Academy of Science in Beijing, declared this fossil was a new dino-bird.

This small bird was clearly capable of flight. It was covered in long feathers and had a pelvic bone that could assist flight. (The pelvic bone is found in many birds—including the hawk, an excellent flier—and various perching birds.) Yet evolutionists subjected this fossil to biased interpretations and portrayed it as an intermediate form. Alan Feduccia states that the traces seen in Protopteryx are a sign that birds were living before dinosaurs, meaning that there is no link between dinosaurs and birds. 207

11 THE IMAGINARY FEATHERS OF SINOVENATOR CHANGII

Despite no feathers being encountered on the 130-million-year-old dinosaur Sinovenator changii, again discovered in China, some evolutionists assume it to have been possibly feathered. The fact that other dinosaur fossils found in the same region were feathered was the basis for that assumption. Even though there are no feathers in the fossil, assuming that it had them and thus concluding that dinosaurs are definitely the ancestors of birds is not, of course, a scientific approach.

The feathers on the other dinosaur fossils found in the Yixian region are also questionable. As you have already seen, many scientists agree that the structures on these dinosaurs are not actually feathers at all.

No potential feathered dinosaur that has been proposed is beyond doubt. Even if certain feathery structures are encountered in dinosaur fossils, it’s still not possible to establish with certainty whether these were real feathers or are just the extensions of ordinary reptile scales. As already set out, prominent evolutionists like Feduccia maintain that these structures are collagen fibers and that regarding them as feathers is a serious mistake.208 In 1997, as a result of observations, it was discovered that the Sinosauropteryx, announced with great media fanfare as a feathered dinosaur only the year before, had in fact no feather-like structures at all. 209

Even if feathered dinosaurs did exist, that would still constitute no evidence that birds evolved from dinosaurs. Birds’ feathers are completely unique, and there is no evidence that they are evolved from any other structures.

12 MICRORAPTOR GUI AND THE CLAIMS OF FOUR-WINGED DINOSAURS

The fossil known as Microraptor gui, discovered by the Chinese paleontologist Xu Xing in January 2003, was accepted by evolutionists as the primitive ancestor of birds, in the same way as a great many other fossils. It was suggested that this reptile had four wings and glided

from tree to tree, and was evidence that birds evolved from dinosaurs. Very soon afterwards, however, scientists announced that there was no evidence to support this claim.

To set out the invalidity of the Darwinist propaganda regarding the fossil Microraptor gui in articles and news reports:

1. The fossil in question was estimated to be 130 million years old—20 million years younger than Archaeopteryx. This shows that the title of “ancestor of birds” awarded to Microraptor gui by evolutionists is a fabrication.

2. Anatomically, Microraptor gui resembles dinosaurs. Its finger sequence agrees with that similarity. Yet the finger sequence in birds, suggested as having evolved from Microraptor gui, is significantly different. This difference is impossible to account for in terms of an ancestral relationship—another blow to the thesis that Microraptor gui was the ancestor of birds.

Considerable evidence shows that Microraptor gui is in fact a dinosaur. Indeed, the paleontologist who discovered and named the fossil wrote, in his report published in Nature, that it belonged to a dinosaur. 210

The finger sequence in Microraptor gui is 1, 2, 3 as in dinosaurs, and not 2, 3, 4 as in birds. Also, there are lethal claws on its hind feet—a characteristic feature of the dromaeosaurs—a group of small and medium-sized carnivorous dinosaurs that lived 144 to 66.4 million years ago.211 Even from an evolutionist perspective, this very different finger sequence makes it impossible to construct a family relationship between Microraptor gui and birds. 212

In general, the anatomy of birds is very different from that of dinosaurs, from which they are said to be descended— and thus, from that of Microraptor gui. 213

3. Scientific developments regarding Microraptor gui have shown that the creature may not have been able to glide in the air, as had once been estimated. Soon after Microraptor gui was described in Nature, objections began to emerge from the scientific world. Although Microraptor gui had been presented as a flying creature, to the accompaniment of great media fanfare, comments arose that in fact, it could not fly at all. In the face of these latest interpretations, National Geographic summarized the position of Microraptor gui:

But the Chinese team that studied M. gui, led by Xu Xing and Zhou Zhonghe of the Institute of Vertebrate Paleontology and Paleoanthropology, doesn’t think this animal ran or flapped well enough to take off. Its leg feathers would’ve tripped it up like a hurdler in a ball gown.

Instead, the ample feathers could have formed an airfoil or parachute similar to those of flying squirrels and other tree-dwelling gliders, the scientists say. . . . Other scientists aren’t sure what to make of the new fossil, arguing that gliding doesn’t necessarily evolve into powered flight: Why waste energy beating your wings when you could take it easy?. . . Some researchers suggest that M. gui's leg feathers weren’t useful for flight at all. 214

To sum up briefly the scientific facts regarding these objections:

A)Birds’ pelvic bones refute the hypothesis that Microraptor gui glided in the air.

Evolutionists link this creature to the alleged evolution of flight because of the apparent feathers on its front and back legs. Some evolutionists suggest that this was a creature that lived in the trees and that glided from branch to branch by spreading its front and rear legs. In reconstructions published in the media, Microraptor gui appears with its rear legs spread open parallel to the ground. But in fact, it is impossible for birds to open their legs out 180 degrees to the side, because of the structure of their pelvic bones, For example, if you buy a chicken from the supermarket and open its legs out to the side, the hip bones will break.

B) Whether the feathers assumed to be on Microraptor gui's legs are actually attached to it or not is debatable. In addition, they are of a sort that would be an obstacle to flight and do not constitute evidence to support the alleged evolutionary origin of flight.

On the other hand, even if we assume that Microraptor gui's legs could open out to the side, there is no relationship between this creature's feathers and the flight feathers of birds. In an article in the May 2003 edition of the journal Bioscience, Kevin Padian, director of the California University Museum of Paleontology, opposed the thesis that Microraptor gui was linked to the origin of flight, setting out the obstacles that its anatomy posed to this scenario. 215

First, he is not convinced that the feathers claimed to be present in Microraptor gui were actually attached to its leg. Second, even if they were, there is no evidence that M. gui's supposed gliding movement could have evolved into the powerful wing flight in birds. Birds never use their rear legs in flight, but keep them trailing backwards, or tucked up against the body like the wheels of an airplane. After setting out these facts, Padian comments: "So the leg feathering in Microraptor has nothing demonstrably to do with the evolution of the kind of flight that more derived birds use." 216

Henry Gee, a paleontologist and also editor of the evolutionist magazine Nature, states that Microraptor gui's gliding movement had nothing to do with bird flight: "Four wings is a perfect recipe for gliding, but not powered, flapping flight." 217

THE AGE PROBLEM AND THE CLADISTIC ERROR

Adherents of the dino-bird theory maintain that the small, carnivorous theropods were the so-called ancestors of birds. They point to certain fossil species discovered in the Liaoning region of China as an evolutionary ancestor, ignoring the fact that even before the theropod dinosaurs had even appeared, there were already birds on Earth capable of regular flight. Archaeopteryx, the oldest bird, lived 150 million years ago—tens of millions of years older than theropod dinosaurs.

Alan Feduccia therefore says that in terms of evolution, Archaeopteryx represents an insurmountable problem:

There are insurmountable problems with that theory. 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.1

Asked during an interview why he does not believe that birds are descended from dinosaurs, he replied:

First, the time line is all wrong. These alleged dinosaurian ancestors of birds occur 25 million to 80 million years after Archaeopteryx . . . Second. . . Evolving flight from the ground up is biophysically implausible. Third, many of the features of birds and dinosaurs—the hands and teeth, for example—don't match. The theropod dinosaur hand consists of the thumb and the next two fingers. The bird hand is made up of the middle three fingers. You can't just flip a switch to go from one type of hand to the other. Of course, it doesn't matter what line of evidence you come up with, you are automatically wrong if it is anything contrary to the dinosaurian origins of birds. 2

Evolutionists resort to the cladistic technique in order to resolve this major problem—or rather, to give the impression of doing so.

Proponents of this new method of fossil interpretation, frequently employed in the world of paleontology in the last 20 to 30 years, maintain that the age of fossils should be completely ignored, that their characteristic features should be compared and evolutionary family trees produced on the basis of the emerging similarities. This summary shows what a huge distortion the method actually creates, by assuming that a 70-million-year-old fossilized species actually lived 170 million years ago, and to build an evolutionary chain of descent on that basis.

Despite being an evolutionist, the paleontologist Larry Martin states just how dogmatic and prejudiced evolutionists' attitude is:

…I am annoyed with dogmatic statements including hints like, "if you make cladistic analysis you will attain the truth." Experimentally you know this is inaccurate, because if you look exactly, all of the expert cladists [one who classifies organisms according to the principles of cladistics] working on the same group will attain different cladograms [a branching, treelike diagram in which the endpoints of the branches represent specific species of organisms]. You know, at best, only one of these cladograms is true. That is probably because it is related to how attentively people examine and select the features included in their cladograms. If you put trash in your cladogram, you will end up with trash.3

Peter Dodson, the Pennsylvania University professor of anatomy, states that the presence of alleged dino-birds following the first birds represents a major difficulty and that using the cladistic method is a forced solution:

Personally, I continue to find it problematic that the most birdlike maniraptoran theropods are found 25 to 75 million years after the origin of birds . . . . Ghost lineages are frankly a contrived solution, a deus ex machina required by the cladistic method. Of course, it is admitted that late Cretaceous maniraptorans are not the actual ancestors of birds, only "sister taxa." Are we being asked to believe that a group of highly derived, rapidly evolving maniraptorans in the Jurassic gave rise to birds, as manifested by Archaeopteryx, and then this

highly progressive lineage then went into a state of evolutionary stasis and persisted unchanged in essential characters for millions of years? Or are actual ancestors far more basal in morphology and harder to classify? If the latter, then why insist that the problem is now solved? 4

The cladistic method is actually a covert admission that the fossil record contradicts the theory of evolution. To summarize:

1) Darwin predicted that detailed examination of the fossil record would yield intermediate forms to fill the gaps between all the known species. This was the expectation of the theory.

2) However, 150 years of paleontological endeavor have revealed no intermediate forms. No trace of such creatures has ever been found.

3) Just as there are no intermediate forms, the ages of the creatures claimed to be one another's ancestors, solely on the basis of similarities, is also inconsistent. A species that appears to be more primitive should not be younger than another species that appears more advanced.

This final objection obliged evolutionists to develop the inconsistent method known as cladistics.

With cladistics, Darwinism loses its scientific mask and becomes a dogma that distorts scientific findings in line with its own preconceptions.

1. David Williamson, "Scientist says ostrich study confirms bird 'hands' unlike those of dinosaurs," UNC News, No. 425, 14 August 2002, www.unc.edu/news/newsserv; David Williamson; Scientist Says Ostrich Study Confirms Bird 'Hands' Unlike Those Of Dinosaurs," EurekAlert, 14 August 2002, http://www.eurekalert.org/pub_releases/2002-08/uonc-sso081402.php
2. Alan Feduccia, "Plucking Apart the Dino-Birds," Discover, Vol. 24, No. 2, February 2003.
3. Case of the Flying Dinosaur, NOVA, Boston Video, 1991.
4. Peter Dodson, "Response by Peter Dodson," American Paleontologist, Vol. 9, No. 4, 2001, pp. 13-14.

A PROBLEM THAT EVOLUTIONISTS IGNORE: THE DATING PARADOX THAT DAMAGES THE SUPPOSED ANCESTRAL FAMILY TREE

Fossils depicted as so-called feathered dinosaurs are far younger than the well known Archaeopteryx. This, the earliest known flying bird on Earth, is around 150 million years old, and had exactly the same flying ability as birds in our day. Therefore, it's impossible to portray these fossils as the as-yet-flightless ancestors of birds. That these supposedly feathered

dinosaurs are much younger than they should be represents one of the insoluble difficulties facing evolutionists.

Another fossil that spoils evolutionists' supposed ancestral relationships: Liaoningornis

The 121-million-year-old fossil Liaoningornis, found in China in November 1996, was announced in a Science magazine article by Lianhai Hou, Larry Martin and Alan Feduccia.1 Liaoningornis had a breastbone to which the flight muscles in modern birds are attached, and flight muscles permitting long flight. In other respects, too, this creature was identical to today's birds. The only difference was that it had teeth.

This showed that, contrary to evolutionist claims, toothed birds are not primitive.2 Indeed, Alan Feduccia stated in Discover magazine that Liaoningornis made it impossible for dinosaurs to represent the origin of birds.3

Sinornithosaurus Millenii and Beipiaosaurus Inexpectus

These dinosaur fossils, discovered in China, are represented as half-bird, half-dinosaur in evolutionist sources. Chris Sloan, an evolutionist paleontologist who analyzed the fossils, suggests that the creatures were unable to fly, but used their wings for balance when running. According to these claims, these fossils are of bird predecessors that were as yet unable to fly. Yet it is a major contradiction to depict these fossils, which lived some 120 million years ago, as supposed ancestors.

BPM 1 3-13

One of the fossils most raised in connection with feathered dinosaur claims was discovered by Dr. Mark Norell, together with a number of Chinese scientists. He gave it the name BPM 13-13, inspired by the Beipiao Palaeontological Museum in the Liaoning region of China.

A Dinosaur Fossil Deliberately Alleged to Have Avian Characteristics: Microraptor

This dinosaur fossil was discovered in China and estimated to be 120 million years old. That it was small in size and possessed the organic structure known as "dino-fuzz",4 —which actually has nothing to do with bird feathers—led to its being interpreted as the ancestor of birds. However, as appeared in the original report announced by the Associated Press, there is no evidence that this dinosaur flew.

In that same report, the Kansas University paleontologist Larry Martin states that the dinosaur was not adapted for flight.5

A Dinosaur Fossil Suggested to Been Feathered by Means of Illustrations:

Velociraptor

The 80-million-year-old Velociraptor is one of those fossils suggested as a so-called transitional form of birds evolving from dinosaurs. Like the others, however, this is a biased evolutionist interpretation, and the feathers depicted in representations are entirely imaginary. In truth, there is no evidence that these creatures had feathers.

Another Flying Dinosaur Myth from Evolutionists: Shenzhouraptor Sinensis

This 10-million-year-old fossil discovered in the Yixian region of China, given the name Shenzhouraptor sinensis, was declared to be a transitional form between dinosaurs and modern-day birds by the paleontologist Ji Qiang. This fossil, reported to the accompaniment of "Missing Link Found!" headlines from evolutionists, actually conflicts with evolutionist claims regarding the origin of birds and with the so-called evidence they present.

1. Ann Gibbons, "New Feathered Fossil Brings Dinosaurs and Birds Closer," Science, Vol. 274, 1996, pp. 720-721.
2. "Old Bird," Discover, 21 March 1997.
3. Ibid.
4. Jeff Hecht, "Micro-raptor," New Scientist, 6 December 2000.
5. Jeff Donn, The Associated Press, 7 December 2000.

CONJECTURAL DRAWING

CONCLUSION

Scientific evidence shows a great many reasons why dinosaurs could not have evolved into birds. No fossil claimed to represent the primitive ancestor of birds actually possesses any such property. The oldest known bird, Archaeopteryx, appears suddenly in the fossil record together with its flawless flight system. No primitive bird existed before. The recent dino-bird claims lack any scientific foundation. Alan Feduccia comments on the despair of the adherents of the theory: “Nowhere has the trap been more successful than in luring paleontologists to the theropod dinosaurian origin of birds.” 218

In his 1999 book, Feduccia summarizes the facts regarding all these claims:

Finally, no feathered dinosaur has ever been found, although many dinosaur mummies with well-preserved skin are known from diverse localities. 219

Even if these inferences about feathered dinosaurs were true, they would still not benefit the theory of evolution. Throughout natural history, tens of millions of species have created a broad biological spectrum, and most of these have become extinct. Winged mammals such as the bat are still alive today, and winged reptiles (pterosaurs) lived in the past. A great many different marine reptiles (ichthyosaurs, for instance) became extinct. Yet the striking aspect of this rich spectrum is how species with vastly different characteristics or anatomical structures appear suddenly in the record, with no primitive forms behind them.

All the complex and unique structures of bird feathers appear all at once in Archaeopteryx. There are no primitive feathers or primitive flight. The avian lung’s irreducibly complex structure makes any primitive version impossible. Fossil findings continue to confirm the fact that living things appeared on Earth through creation, not through evolution, and no dino-bird fanfare can ever alter that truth.

The true origin of birds and all other living things is creation. Living things were created by the will of Allah, flawlessly and in a single moment. In one verse of the Qur’an, it is revealed that He is:

The Originator of the heavens and Earth. When He decides on something, He just says to it, “Be!” and it is. (Surat al-Baqara, 117)

PTEROSAURS—A DILEMMA FOR THE THEORY OF EVOLUTION

Flying dinosaurs are referred to as *pterosaurs* by scientists. These reptiles first appeared in the Upper Triassic period, around 200 million years ago, and later became extinct. These creatures possess the basic features of the reptiles: Their metabolisms are cold-blooded unable to produce their own internal heat, and their bodies are covered in scales. However, thanks to their powerful leathery wings, they could fly.

Recent research has shown these creatures' superior abilities. The first X-rays to detail their skulls led to a new understanding of *pterosaurs'* very sensitive visual system, and that they used their skin-covered wings very efficiently. The investigations performed by David Unwin of the Berlin Museum of Natural History and Lawrence Witmer of Ohio University were reported in the 23 October 2003 edition of *Science* magazine:

With wingspans as broad as 10 meters, *pterosaurs* were impressive predators. . . CT scans revealed the three semicircular canals of the inner ear, for example, which provide the sense of balance. The radius of the looping canals was quite large. . . Compared to birds, *pterosaurs* had a remarkably large flocculus. This part of the brain helps coordinate the head, neck, eyes, keeping the gaze steady while an animal moves. Whys such a big flocculus? Witmer speculates that it was receiving signals from the skin=covered wings, which contained muscle fibers. "It's conceivable that they've recruited the wing as a large sensory organ." he says. "That's a important idea and a really exciting one." Unwin says. He says the potential efficiency of such a "smart wing" could help explain how giant pterosaurs were able to get off the ground. [220]

A report in *New Scientist* under the heading "X-rays reveal pterosaurs aerial expertise" explained further:

Pterosaurs, the extinct flying reptiles, had the largest neural system for processing balance information ever seen in a vertebrate. It probably allowed them to perform complex aerobatic maneuvers while keeping their gaze firmly centered on their prey.

The flocculus integrates signals from the balance organs, joints, muscles and skin. It sends on neural signals that produce small, automatic movements in the eye muscles to keep the image on an animal's retina steady. Without it, our visual experience would be like a shaky video camera, says Witmer. [221]

The smooth imaging system in question possessed by these flying reptiles resembles that used in camera images taken from modern-day helicopters based on a very delicate gyro-stabilized camera. Millions of years ago, these living things possessed a similarly advanced system to that in modern helicopters. Of course, it runs against all common sense to imagine that these flying reptiles acquired their expertise through blind evolutionary mechanisms. This

evidence of creation in their sensory systems is by itself a major dilemma for the theory of evolution.

Paleontological discoveries also demonstrate that these flying reptiles were created, since they emerge suddenly and fully formed, with no transitional forms between them and earlier terrestrial creatures. An article published in *Science* magazine in 1999 admits this situation, which poses a severe difficulty for the theory of evolution:

For use in understanding the evolution of vertebrate flight, the early record of pterosaurs and bats is disappointing: Their most primitive representatives are fully transformed as capable fliers. [222]

As the above extract states, flying reptiles' wings have a unique structure, and no land reptile has any forelimb that might be considered its earlier version. No semi-winged reptile has yet been encountered in the fossil record.

Indeed, as in the case with birds, it is impossible for any such creatures to have existed. By the time they lost the use of their front legs, they would have still been unable to fly and thus, have been disadvantaged in their competition with other reptiles. In the survival of the fittest, they could have not survived! Their example alone is enough to show the inconsistencies in the theory of evolution.

Examination of the flying reptile wing structure reveals that it is too perfect to be explained in terms of evolution. There are five fingers on the wings of flying reptiles, just as there are five on other reptiles' forelimbs. However, the fourth digit is on average 10 to 15 times longer than the other four, and forms the outer "rib" of the leathery wing. Had any terrestrial reptile evolved into a flying one, then this fourth digit would have had to lengthen slowly, over generations. Not only that fourth finger but the entire wing structure would have to have developed through random mutations, which would have had to endow the creature with advantages at every step along the way.

Yet there is not the slightest evidence that such a process ever took place. Such claims therefore go no further than a series of assumptions. Duane T. Gish, an eminent critic of the theory of evolution on the paleontological level, comments:

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 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 . . . . [223]

Indeed, the fossil record reveals that such an evolutionary process never happened. The fossil record contains only terrestrial reptiles and perfectly formed flying reptiles, but no transitional forms. Despite being an evolutionist, Robert L. Carroll, one of the best-known names in the field of vertebrate paleontology, makes this admission:

. . . 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.** [224]

The fact that terrestrial and flying reptiles each appeared with their very different structures, with no evolutionary relationship between them, constitutes evidence for creation, not evolution.

FLIGHTLESS BIRDS HAVE FLAWLESS STRUCTURES TOO

Many species of birds, such as ostriches, domestic chicken and penguins, are classified as flightless. And there are a number of differences between the anatomies of flightless and flying birds. The former lack one or more components of the complex anatomy that makes flight possible—most importantly, feather asymmetry, the deeply keeled sternum (breast bone), and their flight muscles.

Flying birds' asymmetric feather structure gives them an aerodynamic advantage. The number of strands on the right side of the feathers haft is different from the left, creating the same aerodynamic effect as the difference between the upper and lower surfaces of a plane's wing. Lift force is produced thanks to the upper surface being more curved, and the bird is better able to take to the air. In flightless birds, however, the feathers are symmetrical—one of the reasons they are unable to fly.

In addition to feather asymmetry, the deeply keeled sternum also plays a major role in bird flight. If we think of the skeleton of a domestic chicken, this is an extension that extends in a line in the middle of the breastbone (sternum). Although this exists in the majority of flightless birds, the breastbones of such species as the kiwi, emu and ostrich, part of the ratitae classification, lack such a heavy sternum.

Although chickens, with a deeply keeled sternum are able to fly a few meters, species with none, such as the ostrich, are unable to fly at all. These flightless birds' tails are very short. Thanks to their powerful legs, however, ostriches (*Struthio camelus*, a species of bird peculiar to Africa) can run very fast. The wing bones in these and some other flightless birds are similarly very small, and they have few flight muscles.

For these birds, however, the lack of anatomical structures that permit flight is not a deficiency, nor is the inability to fly a disadvantage. Even without this ability, they are perfect living things endowed with a flawless anatomy.

Every living species has different features that can afford it an advantage. The ostrich uses its wings for balance only as it runs at speeds of up to 70 kilometers/hour (43.495 miles per hour). At 1.5 meters (4.92 feet) tall, the emu *(Dromaius novaehollandiae)* is the second-largest bird after the ostrich. They also achieve running speeds of up to 50 kilometers/hour (31 mph).

On the other hand, the wings of some birds have functions besides flight. Depending on the species, birds may sometimes use their wings for balance when running, cooling themselves in hot weather, warming up in cold weather, protecting their rib cage in the event of a fall, frightening enemies, or providing shade for chicks.

Evolutionists maintain that birds of this kind gradually lost their ability to fly. Contrary to what they imagine, however, this claim contributes nothing to the theory of evolution, because rather than explaining the acquisition of an ability, it concerns the loss of one that already exists. The unfounded claims of evolution regarding flightless birds indicate despair rooted in lack of evidence. Evolutionists seek to portray living things that clearly exhibit some of the proofs of creation and the existence of Allah as alleged evidence of evolution.

In the Qur'an Allah reveals the existence of people who conceal the truth in order to deny Him:

Do not mix up truth with falsehood and knowingly hide the truth. (Surat al-Baqara, 42)

THE ORIGIN OF FLIGHT IN INSECTS

Insects are part of the *Insecta* sub-phylum within the arthropod (jointedlegged) phylum. Insects are one of the four living groups on Earth with the ability to fly, the others being birds, flying reptiles and bats.

The origin of flight in insects, as with the other groups, also constitutes a huge dilemma for the theory of evolution.

But so is the origin of insects in general an insoluble puzzle for evolutionists!

The oldest insect fossils date back to the Devonian Period (417 to-354 million years ago). Insects in the strata from this period appear suddenly, with flawless structures, and no living organisms can be proposed as their ancestors. As the well-known French paleontologist Pierre Paul Grassé says, "We are in the dark concerning the origin of insects." [225]

For example, cockroaches appear suddenly and with their present-day structures in the Earth's strata. Betty Faber, of the American Museum of Natural History, states that fossilized roaches from 350 million years ago are exactly the same as those of today. [226] Anthropods such as spiders, acarid and centipedes are not true insects, although they are usually referred to as such. Very significant fossils of these creatures were presented at the annual meeting of the American Association for the Advancement of Science in 1983. The most striking feature of these 380-million-year old fossils was their being identical to present-day specimens. One of the scientists who examined them commented, **"they looked like they might have died yesterday."** [227]

The oldest known flying insects are dragonflies, which appear in the Pennsylvanian Period (325 to 286 million years ago). Just like the other species in the fossil record, they appear suddenly, and with no ancestors. For instance, a 320-million-year-old fossil dragonfly has exactly the same wing structure and characteristics as living specimens.

Other flying insects such as the housefly, which pose still more dilemmas for evolutionists, appear in the same fossil strata as other species of wingless insects. This demolishes the claim that winged insects evolved from wingless ones. In their book *Biomechanics in Evolution,* Robin Wootton and Charles P. Ellington write:

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. [228]

The theory of evolution claims that living things have evolved from the primitive to the more developed. Therefore, the fact that these insects have the same features as their present-day counterparts and that no primitive creatures lived before them is evidence that they did not come into existence through evolution. Almighty Allah, Lord of the Worlds, created insects like all other living things, together with the physical structures and wings that enable them to fly.

The special anatomy for flight in insects

These tiny creatures amaze scientists by their ability to hover suspended in the air, fly backwards, suddenly accelerate to more than 150 kilometers/hour (93.205 miles per hour) and engage in superior acrobatics to any fighter pilot. Insects have highly advanced mechanisms for flight, including perfect wings, a light exoskeleton, balance organs, and advanced warning systems that enable them to navigate and take off. Their bodies are covered by an exoskeleton that fulfill a set of functional roles including moving their legs and wings.

Over the last 30 years, the scientific world has made it a priority to understand insects' superior flying performance. Airplanes operate by using the flow of air over their wings and are propelled with the assistance of engines. Insects, on the other hand, have no engines for takeoff, but beating their wings gives them a powerful lift. [229]

In order to take off, most insects have to beat their thin wings very fast— and during flight, an average of several hundred times a second.[230] Some insects beat their wings 600 times a second. Such rapid movement taking place in so short a time is impossible to be replicated technologically.

California University Professor of Biology Michael Dickinson and his team developed a robot to duplicate the flight technique of fruit flies. Yet their robot is 100 times larger than a fly and can open and close its wings at a speed only 1,000 times slower than the fruit fly can. Furthermore, in order to replicate the fly's actions, the robot—which can only move its wing once every five seconds—must use six separate engines. [231]

Many scientists like Professor Dickinson have for years carried out numerous experiments in order to expose the wing beating actions of flies. During these experiments, Dickinson determined that fruit flies do not use a simple up-and-down movement, as if their wings were hinged, but use very complex aerodynamic techniques. Moreover, their wings change direction with every beat. Scientists seeking to analyze the complex technique state that the classical aerodynamics employed for plane wings is insufficient, because fruit flies make use of more than one aerodynamic principle. The flight muscles that permit the 2.5-millimeter (0.098-inch) fruit fly to beat its wings 200 times a second are regarded as the most powerful in any insect.[232] The Turkish magazine *Hürriyet Bilim* refers to the perfection of the balance and speed as the flies beat their wings:

It is very dangerous for a pilot to bend perpendicular wings. As the plane takes off, the air current acting on the wing finds it more difficult to attach to the wing edge. When the current disappears completely, the plane wobbles and loses height. On the other hand, this is an advantage for the fruit fly, because it does not have to maintain its wings in one position. The fly beats its wings so quickly that the wings perform another movement by the time that the edge directing the flight ceases to be in contact with the air current. At the end of every movement, it rotates its wings around themselves, causing them to beat in the opposite direction. This forms a vortex and no instability takes place. [233]

The fine channels in insects' wings permit air and blood to flow through them.[234] With flies, however, a great many additional details—such as their sharp eyes, the small rear wings they use for balance, and the receptors that regulate the wings' timing—further demonstrate the perfection in their creation. All of these must exist and operate at the same time. If the thorax muscles lack sufficient energy, or if the insect's metabolism can't provide the wingbeats frequent enough, these shortcomings by themselves will be sufficient to prevent flight taking place. The fact that all these systems in the fly's body work together in perfect harmony is one of the proofs of Almighty Allah's sublime creation.

The theory of evolution tries to account for insect flight by claiming that flight evolved independently in each different group of flying insects. Wings—which could not have developed even once through random mutations—are depicted as having evolved separately four times in some species.

Indeed, the evolutionist scenario claims that wings evolved once, subsequently disappeared, evolved again, and disappeared yet again. For example, one article in *Nature* magazine suggested that after losing its wings, the stick-insect *(Phasmatodea)* preserved the muscular and nervous systems for flight, and that its wings re-appeared at a later date. This claim isn't accepted even among evolutionists. Although Nature used this account as its cover story, it also states that this claim flies in the face of the theory's structure agreed upon by evolutionists.[235]

New Scientist states that such claims attracted a strong reaction from entomologists, along the lines of "Impossible, impossible, impossible."[236] In a report in *Science News*, Michael F. Whiting comments, "It's as if a mammalogist found a whale walking around on legs."[237]

Evolutionists see there is no basis to their claims, yet they still insist on ignoring the fact and using hollow words in forced evolutionary accounts. However, the evidence that living things were created from nothing is too strong. Even if evolutionists are reluctant to accept the fact, Allah's magnificent artistry and infinite knowledge manifest themselves throughout the universe.

In one verse of the Qur'an, Allah reveals that human beings should reflect upon the fact of creation:

O humanity! An example has been made, so listen to it carefully. Those whom you call upon besides Allah 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! (Surat al-Hajj, 73)

THE DRAGONFLY FLIGHT SYSTEM IS A MARVEL OF CREATION

Dragonflies cannot fold their wings, and their flight muscles and the way they move their wings are different from those of other insects. On account of these features alone, evolutionists refer to dragonflies as *"primitive"* insects. Yet their flight system is actually a marvel of creation.

Skorsky, the world's foremost helicopter manufacturer, used the dragonfly as a model for one of the helicopters it developed.[1] **IBM, which collaborated with Skorsky on this project, transferred a dragonfly's image onto an IBM 3081 computer. Some 2000 special images were then produced, based on the dragonfly's aerial maneuvers. By the end of the study, Skorsky used the model that emerged to produce a helicopter for carrying troops and equipment.**

Nature photographer Gillian Martin carried out a two-year study of dragonflies,[2] **which showed that these insects possess a highly complex flight system.**

The dragonfly's head, thorax, and segmented abdomen give the impression that it is covered in metal or plastic. Thanks to the two diagonal pairs of wings on its throrax, which can be of various colors from ice-blue to dark red, the dragonfly has a very high level of maneuverability. No matter what its speed and direction, it can suddenly stop and begin flying in the opposite direction—or hover in the air, waiting for a suitable moment to attack its prey. From there, it can perform sharp turns as it goes into the attack, quickly attaining a speed of 40 kilometer/hour (24.85 miles per hour), which is astonishing for an insect. Sprinters running at the Olympic Games can manage only 39 kilometers/hour (24.23 mph).

The dragonfly also has perfect sight. Its two wraparound eyes are regarded as the best in the insect world. Each eye consists of up to 30,000 separate lenses. These eyes, each of which is semi-spherical and covers half of its head, provide a very wide field of vision—the dragonfly can even see what is going on behind it.[3]

As you see, the dragonfly's various systems constitute a perfect whole. The slightest deficiency in any one will cause the others to cease functioning. Yet since they have all been created flawlessly, the insect has thrived for millions of years.

1. "Exploring The Evolution of Vertical Flight—at The Speed of Light," *Discover,* October 1984, pp. 44-45.
2. "Helikopter Böceği *(The Dragonfly),*" Star, 16 August 1984, pp. 32-33.
3. David Attenborough, *The Living World,* Istanbul" Inkilap Publishing House, 1982, p. 52.

THE SUPERIOR FLIGHT TECHNIQUES OF INSECTS

Insect flight is too complex to be replicated, despite the advanced 21st century technology and accumulated knowledge in the field of engineering. The structures that make this action possible in flies are, according to scientists, a marvel of technology. From this point of view, they are like robots created for flight. Biology professor Michael Dickinson compares flies to marvels of mechanical technology and goes on to say:

Flies are extraordinary creatures. Human beings invariably see them every day, but we may be unaware of them. These extraordinary, tiny machines fly about right at the ends of our noses. [238]

As long as science cannot account for the physical structures and flight techniques in insects, it is exceedingly irrational to claim that they came into existence by blind chance. The mutations that Darwinism offers as the architects of these changes are harmful effects that either cripple the living thing involved, causing permanent damage to its anatomy, or even result in death. Mutations based on random effects cannot possibly have given rise to such complex systems as a fly's wings, eyes, muscles, antennae, respiration and digestion. Human beings cannot open and close their arms even 10 times a second, whereas a fly can beat its wings **500 times a second**. Moreover, they beat both wings simultaneously. The slightest imbalance in vibration between the wings will cause it to lose balance, yet such disharmony never arises.

In an article, "The Mechanical Design of Fly Wings," R. Wootton writes:

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. [239]

The theory of evolution, which regards blind chance as a creative force, cannot explain how creatures with such flawless structures appeared suddenly on Earth.

Flies also possess a high-speed maneuverability that has occupied the minds of designers and engineers for many years. If a fly sees a potential mate change direction, it can change its own direction accordingly in just 30 milliseconds (1/1,000th of a second). This astonishing coordination is the result of two small "balancing organs" known as the halters.

Since some insects have four wings, and others two, evolutionists claim that two-winged flies evolved from four-winged predecessors, and that the two rear wings either became useless and vanished or else developed into halters. These organs are known to function like the gyroscopes that keep planes from going off course. Just as it's impossible to claim that gyroscopes developed by chance, it's similarly impossible to maintain that a far superior and vitally important organ in insects is the result of unconscious coincidences.

Experiments reveal that the images that the fly's eye-brain system perceives automatically give rise to wing actions. However, this visual data goes directly to the halter organs, not to the wings. Moreover, according to Dickinson, the function of the halter organ is more important than had previously been thought. For example, halters enable the insect to fly at the same elevation. If the insect makes a sudden turn, the halters react like the flight muscles —a very intelligent and efficient aerodynamic technique. In this way, the device that establishes balance is always active, and the nervous system is regulated to control its mechanics at all times.

Dr. Cole Gilbert of Cornell University has shown that the fly sends information about the position of its head to the wings and halter organs. With this complex nerve network, it can perform complex activities that put our modern-day technology to shame.

To believe that halter organs of the greatest importance came into being by chance to meet the fly's needs is as irrational as believing that raw materials can come together at random to produce an airplane.

There is no evidence that flies evolved from any primitive ancestor. It is also clearly no evidence that the halter organs are useless remains left over from the rearmost wings. Experimental data and the fossil record reveal that flies were created together with all these advanced systems they need.

Flies have been using the laws of aerodynamics for millions of years. The fact that the most advanced modern technology cannot duplicate flies' flight techniques is one of the manifest proofs of creation. Allah manifests His infinite reason and knowledge in these tiny creatures. In one verse He reveals:

Allah is not ashamed to make an example of a mosquito or of an even smaller thing. As for those who believe, they know it is the truth from their Lord. But as for those who disbelieve, they say, "What does Allah mean by this example?" He misguides many by it and guides many by it. But He only misguides the deviators. (Surat al-Baqara, 26)

AERODYNAMICS IN A BUTTERFLY'S WINGS

Researchers from Great Britain's Oxford University developed a new technique in order to study butterfly flight. They found that butterflies do not beat their wings at random, but actually use far more flight tactics than had previously been supposed.

Researchers from Cambridge University in England, on the other hand, observed that wing movements of peacock butterflies establish a vortex on the farthest extremity of the wing that enables the insect to rise in the air. According to Robert Srygley, a professor of behavioral ecology at South Korea University and also a researcher at Oxford University, investigations have shown that butterfly flight is far more complex:

Free-flying butterflies use all of the known mechanisms to enhance lift—wake capture, leading-edge vortex, clap and fling, and active and inactive upstrokes—as well as two mechanisms that had not been postulated, the leading-edge vortex during the upstrokes and the double leading-edge vortex. [240]

To make sudden changes in their altitude, butterflies establish vortexes and double vortexes at the extremities of their wings by changing the rotation and speed of their wing beats, and use different aerodynamic stages in consecutive wing movements. According to Robert Srygley, the apparently random fluttering of butterflies is actually a series of different aerodynamic mechanisms as they maneuver and settles into level flight. Furthermore, there is a great deal that we do not know with regard to the flight of all insects:

Just about every flight mechanism in the insect world remains unexplained. [241]

Robert Michelson, a research engineer at the Georgia Technical Research Institute, emphasizes that the various aerodynamics displayed during the various forms of butterfly flight are quite astonishing. In his research, he used a robot known as an *entomopter* that beats its tiny wings and states that insect wings are "physically complex, difficult to miniaturize."[242] Wing control consumes high levels of energy. This research, according to the California University Electrical Engineering Faculty Professor Ron Fearing, contributes to our understanding of the variety of aerodynamics in nature.

In fact, all these creatures studied by scientists are just a few of the examples of Allah's creative artistry. Allah's infinite knowledge is plain for all to see, everywhere in nature.

Even scientists with no religious beliefs can't refrain from expressing their amazement at such sublime and incomparable knowledge.

That is Allah, your Lord. There is no god but Him, the Creator of everything. So worship Him. He is responsible for everything. (Surat al-An'am, 102)

SCIENTISTS ARE INSPIRED BY INSECTS' FLIGHT SYSTEMS

Many research institutions aim to develop technology by imitating living beings in nature. (For details see, Harun Yahya, *Biomimetics: Technology Imitates Nature*, Istanbul: Global Publishing, March 2006).

Most of the robots and devices developed in recent years were inspired by nature. Insects are most frequently imitated, especially their exceedingly successful flying techniques. In recent years, Charles Ellington (a professor from Cambridge University), Robert Michelson (a research engineer from the Georgia Technical Research Institute) and others have shown that insects take advantage of their wings being very small by establishing vortexes that a plane never can—vortexes that they use during take-off and flight. [243]

Miniature Flying Robots

Biologists and technology experts from the University of California at Berkeley spent four years developing what they called the "Micromechanical Flying Robot," which they say will one day be able to navigate through the air like a fly so as to obtain covert intelligence about enemies, investigate the surface of the planet Mars, and monitor dangerous chemical wastes. They are planning devices that can climb to great heights, make sudden movements, and beat their wings with a precision so far to be found only in nature. Due to the importance of these studies, the Pentagon's Advanced Defense Research Project Center is providing the project with financial backing.

Although they have advanced technical expertise and all manner of material backing, scientists are still unable to imitate the dimensions, weight, energy and, most important of all, the aerodynamic delicacy of a tiny fly. Indeed, scientists express their amazement in the face of insects' flying abilities:

Aviation engineers look with envy on birds and especially insects. Their flapping wings lift and propel them far more efficiently than the fixed wings of aircraft. One reason is their ability to exploit the subtleties of stalling. If the angle of attack of a wing is increased, it ultimately stalls, with sudden disastrous loss of lift. No fixed-wing aircraft dare risk stalling. But an insect with oscillating wings can exploit an intriguing loophole in the laws of aerodynamics. Accelerated at a high angle of attack into the stalling regime, a wing takes a short while to stall. And until it does, it generates enormous lift. By speeding into stall and out again at each flap, an insect wing develops amazingly high average lift. [244]

Tim Sands, a professor of material science and engineering, indicates how a fly to be able to lift its own weight, turn more quickly than any fighter jet, fly even if its wings are torn, and land on the ceiling.[245] Ron Fearing agrees: "Insects have tremendous maneuverability."[246] Michael Dickinson, a professor of biology from Berkeley University and eminent researcher into insect flight, says, "Flapping is much more aerodynamically efficient at small sizes than conventional aerodynamics."[247]

But making a robot that beats its wings is no easy matter. What really defeats scientists is the impossibility of giving that robot the intelligence that makes flight possible. Says Ron Fearing, "The good news is we know what the wings need to do. The bad news is we don't know how to do it."[248] Michael Dickinson states that fruit flies beat their wings 200 times a second and use three different mechanisms in order to take off. This lets a fruit fly make a U-turn in the air with just eight wing movements, in as little as 40 milliseconds. [249]

According to Dickinson, in order to achieve such a level of control, the insect robot at Berkeley can make mistakes only three times, approximately on the fourth one, it will drop dead. Robert Michelson, the chief engineer at Georgia Technology Research Institute, states how difficult it is to construct a robot that beats its wings for balance and control:

Until we can do things as well as you find them in Creation, you have to go to alternate techniques. [250]

Even though we possess all the technology, intelligence, energy, and financial backing, we still cannot imitate the systems we witness in nature. These marvels of creation show just a few examples of Allah's matchless creative artistry.

It is illogical to ascribe the origin of these living things to chance. No coincidence can produce a helicopter, for instance. Even if all the components used in its manufacture were left out in the open, natural phenomena could never assemble the helicopter by chance. To maintain that such a thing is possible is just as illogical as to claim that an insect's wings could form by coincidence. The origin of insects clearly confirms creation.

In one verse Allah states:

Say: "Who is the Lord of the heavens and the Earth?" Say: "Allah." Say: "So why have you taken protectors apart from Him who possess no power to help or harm themselves?" Say: "Are the blind and seeing equal? Or are darkness and light the same? Or have they assigned partners to Allah Who create as He creates, so that all creating seems the same to them?" Say: "Allah is the Creator of everything. He is the One, the All-Conquering." (Surat ar-Ra'd, 16)

CONCLUSION

It is not possible for a cart designed for use on roads to fly. In the same way, neither is it possible for animals to fly that have not been created to do so. The fields of expertise of those who produce a terrestrial vehicle—a car, for example—are completely different from those constructing an airplane. Even if some materials exhibit similarities, these have still been specially modified according to their function, shape, and where they will be used, etc. Both cars and airplanes have windows and tires. However, these have totally different specifications and are produced with the most appropriate designs. The slightest error in manufacture or design could give rise to very dangerous consequences. No one aware of this conscious planning could look at a car and claim that it bears certain similarities to a plane, so under the effect of external influences, this car could in time be able to fly.

Even if millions of years pass, a terrestrial vehicle can never become airworthy. Evolution's accounts regarding the origins of birds are just as i irrational.

As you have seen throughout this book, there is no evidence that birds or any other flying creature evolved from terrestrial animals. On the contrary, their complex structures and their sudden appearance in the fossil record shows that all these living things and their necessary flight systems were created together.

The idea that these species evolved from other, more primitive ones is a dogma defended for other than scientific purposes. Heading the list is the urge to maintain the materialist philosophical foundations of Darwinism. Another aim is personal interest. A rich and powerful supposedly scientific establishment backs the theory of evolution, and the gaining of support from that community, and concerns over career and prestige may well influence many others. People are unwilling to concede that their research, hard work and money were all spent for nothing.

Storrs L. Olson, head of the Smithsonian Institute Ornithology Department, touches on this:

The "birds-are-dinosaurs" people have dominated this discussion [as to whether birds supposedly evolved from dinosaurs or some other reptile group] for a long time. **There are a lot of problems with birds being dinosaurs,** although the theory has been publicized in the popular media. **To overturn birds-are-dinosaurs would be a tremendous embarrassment. There are millions of dollars and lot of careers tied up in this debate.** [251]

Why does devotion to the theory of evolution become an obsession? The most important reasons are the materialist philosophy mentioned earlier, and the atheism that seeks a scientific basis. Some are unwilling to believe that Allah created them, that they are responsible to our Lord, and that in the Hereafter they will be held to account for their lives in this world. Therefore, they seek to justify their denial. However, the existence of Allah is too obvious to be concealed by any deception. With every breath these people take, with their every heartbeat,

with their every step, on the ground, with every fruit they eat—everywhere, they are surrounded by evidence of Allah's glorious existence.

In the Qur'an, Allah refers to those who **"tell a lie against Allah and they know it"** (Surah Al 'Imran, 75), to **"descend on every evil liar"** (Surat ash-Shu'ara', 222), to those who **"knowingly conceal the truth"** (Surat al-Baqara, 146), who **"mix up truth with falsehood"** (Surat al-Baqara, 42) and who "**use fallacious arguments to deny the truth**" (Surat al-Kahf, 56).

The attitudes of such people we encounter nowadays were also displayed by people in the past, who spent their years in this world in exactly the same error. However, since these people do not wish to accept the existence and oneness of Allah, and that He is the sole Creator of all things, they have always adhered to one superstitious belief or another. And they have never been successful in their aims, as a requirement of the verse:

" . . . Rather We hurl the truth against falsehood and it cuts right through it and it vanishes clean away!" (Surat al-Anbiya', 18)

As revealed in the Qur'an, the attitude of believers is one of, **"who sought right guidance"** (Surat al-Jinn, 14) and **" Show integrity for the sake of Allah, bearing witness with justice"** (Surat al-Ma'ida, 8).

This fact is that our Lord, Allah, is the sole Creator of all.

His matchless creative artistry is revealed thus in the Qur'an:

He is the Originator of the heavens and the Earth. How could He have a son? He has no wife. He created all things and He has knowledge of all things. That is Allah, your Lord. There is no god but Him, the Creator of everything. So worship Him. He is responsible for everything. Eyesight cannot perceive Him, but He perceives eyesight. He is the All-Penetrating, the All-Aware. "Clear insights have come to you from your Lord. Whoever sees clearly, does so to his own benefit. Whoever is blind, it is to his own detriment. I am not here as your keeper." (Surat al-An'am, 101-104)

THE DECEPTION OF EVOLUTION

Darwinism, in other words the theory of evolution, was put forward with the aim of denying the fact of creation, but is in truth nothing but failed, unscientific nonsense. This theory, which claims that life emerged by chance from inanimate matter, was invalidated by the scientific evidence of miraculous order in the universe and in living things. In this way, science confirmed the fact that Allah created the universe and the living things in it. The propaganda carried out today in order to keep the theory of evolution alive is based solely on the distortion of the scientific facts, biased interpretation, and lies and falsehoods disguised as science.

Yet this propaganda cannot conceal the truth. The fact that the theory of evolution is the greatest deception in the history of science has been expressed more and more in the scientific world over the last 20-30 years. Research carried out after the 1980s in particular has revealed that the claims of Darwinism are totally unfounded, something that has been stated by a large number of scientists. In the United States in particular, many scientists from such different fields as biology, biochemistry and paleontology recognize the invalidity of Darwinism and employ the fact of creation to account for the origin of life.

We have examined the collapse of the theory of evolution and the proofs of creation in great scientific detail in many of our works, and are still continuing to do so. Given the enormous importance of this subject, it will be of great benefit to summarize it here.

THE SCIENTIFIC COLLAPSE OF DARWINISM

Although this doctrine goes back as far as ancient Greece, the theory of evolution was advanced extensively in the nineteenth century. The most important development that made it the top topic of the world of science was Charles Darwin's *The Origin of Species*, published in 1859. In this book, he denied that Allah created different living species on Earth separately, for he claimed that all living beings had a common ancestor and had diversified over time through small changes. Darwin's theory was not based on any concrete scientific finding; as he also accepted, it was just an "assumption." Moreover, as Darwin confessed in the long chapter of his book titled "Difficulties on Theory," the theory failed in the face of many critical questions.

Darwin invested all of his hopes in new scientific discoveries, which he expected to solve these difficulties. However, contrary to his expectations, scientific findings expanded the dimensions of these difficulties. The defeat of Darwinism in the face of science can be reviewed under three basic topics:

1) The theory cannot explain how life originated on Earth.

2) No scientific finding shows that the "evolutionary mechanisms" proposed by the theory have any evolutionary power at all.

3) The fossil record proves the exact opposite of what the theory suggests.

In this section, we will examine these three basic points in general outlines:

THE FIRST INSURMOUNTABLE STEP: THE ORIGIN OF LIFE

The theory of evolution posits that all living species evolved from a single living cell that emerged on the primitive Earth 3.8 billion years ago. How a single cell could generate millions of complex living species and, if such an evolution really occurred, why traces of it cannot be observed in the fossil record are some of the questions that the theory cannot answer. However, first and foremost, we need to ask: How did this "first cell" originate?

Since the theory of evolution denies creation and any kind of supernatural intervention, it maintains that the "first cell" originated coincidentally within the laws of nature, without any design, plan or arrangement. According to the theory, inanimate matter must have produced a living cell as a result of coincidences. Such a claim, however, is inconsistent with the most unassailable rules of biology.

LIFE COMES FROM LIFE

In his book, Darwin never referred to the origin of life. The primitive understanding of science in his time rested on the assumption that living beings had a very simple structure. Since medieval times, spontaneous generation, which asserts that non-living materials came together to form living organisms, had been widely accepted. It was commonly believed that insects came into being from food leftovers, and mice 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 originate from it after a while.

Similarly, maggots developing in rotting meat was assumed to be evidence of spontaneous generation. However, it was later understood that worms did not appear on meat spontaneously, but were carried there by flies in the form of larvae, invisible to the naked eye.

Even when Darwin wrote *The Origin of Species*, the belief that bacteria could come into existence from non-living matter was widely accepted in the world of science.

However, five years after the publication of Darwin's book, Louis Pasteur announced his results after long studies and experiments, that 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."[252]

For a long time, advocates of the theory of evolution resisted these findings. However, as the development of science unraveled the complex structure of the cell of a living being, the idea that life could come into being coincidentally faced an even greater impasse.

INCONCLUSIVE EFFORTS OF THE TWENTIETH CENTURY

The first evolutionist who took up the subject of the origin of life in the twentieth century was the renowned Russian biologist Alexander Oparin. With various theses he advanced in the

1930s, he tried to prove that a living cell could originate by coincidence. These studies, however, were doomed to failure, and Oparin had to make the following confession:

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.[253]

Evolutionist followers of Oparin tried to carry out experiments to solve this problem. The best known experiment was carried out by the American chemist Stanley Miller in 1953. Combining the gases he alleged to have existed in the primordial Earth's atmosphere in an experiment set-up, and adding energy to the mixture, Miller synthesized several organic molecules (amino acids) present in the structure of proteins.

Barely a few years had passed before it was revealed that this experiment, which was then presented as an important step in the name of evolution, was invalid, for the atmosphere used in the experiment was very different from the real Earth conditions.[254]

After a long silence, Miller confessed that the atmosphere medium he used was unrealistic.[255]

All the evolutionists' efforts throughout the twentieth century to explain the origin of life ended in failure. The geochemist Jeffrey Bada, from the San Diego Scripps Institute accepts this fact in an article published in *Earth* magazine in 1998:

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?[256]

THE COMPLEX STRUCTURE OF LIFE

The primary reason why the theory of evolution ended up in such a great impasse regarding the origin of life is that even those living organisms deemed to be the simplest have incredibly complex structures. The cell of a living thing is more complex than all of our man-made technological products. Today, even in the most developed laboratories of the world, a living cell cannot be produced by bringing organic chemicals together.

The conditions required for the formation of a cell are too great in quantity to be explained away by coincidences. The probability of proteins, the building blocks of a cell, being synthesized coincidentally, is 1 in 10^{950} for an average protein made up of 500 amino acids. In mathematics, a probability smaller than 1 over 10^{50} is considered to be impossible in practical terms.

The DNA molecule, which is located in the nucleus of a cell and which stores genetic information, is an incredible databank. If the information coded in DNA were written down, it would make a giant library consisting of an estimated 900 volumes of encyclopedias consisting of 500 pages each.

A very interesting dilemma emerges at this point: DNA can replicate itself only with the help of some specialized proteins (enzymes). However, the synthesis of these enzymes can be realized only by the information coded in DNA. As they both depend on each other, they have to exist at the same time for replication. This brings the scenario that life originated by itself to

a deadlock. Prof. Leslie Orgel, an evolutionist of repute from the University of San Diego, California, confesses this fact in the September 1994 issue of the *Scientific American* magazine:

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.[257] No doubt, if it is impossible for life to have originated from natural causes, then it has to be accepted that life was "created" in a supernatural way. This fact explicitly invalidates the theory of evolution, whose main purpose is to deny creation.

IMAGINARY MECHANISM OF EVOLUTION

The second important point that negates Darwin's theory is that both concepts put forward by the theory as "evolutionary mechanisms" were understood to have, in reality, no evolutionary power.

Darwin based his evolution allegation entirely on the mechanism of "natural selection." The importance he placed on this mechanism was evident in the name of his book: The Origin of Species, *By Means of Natural Selection…*

Natural selection holds that those living things that are stronger and more suited to the natural conditions of their habitats will survive in the struggle for life. For example, in a deer herd under the threat of attack by wild animals, those that can run faster will survive. Therefore, the deer herd will be comprised of faster and stronger individuals. However, unquestionably, this mechanism will not cause deer to evolve and transform themselves into another living species, for instance, horses.

Therefore, the mechanism of natural selection has no evolutionary power. Darwin was also aware of this fact and had to state this in his book *The Origin of Species:*

Natural selection can do nothing until favourable individual differences or variations occur.[258]

LAMARCK’S IMPACT

So, how could these "favorable variations" occur? Darwin tried to answer this question from the standpoint of the primitive understanding of science at that time. According to the French biologist Chevalier de Lamarck (1744-1829), who lived before Darwin, living creatures passed on the traits they acquired during their lifetime to the next generation. He asserted that these traits, which accumulated from one generation to another, caused new species to be formed. For instance, he claimed that giraffes evolved from antelopes; as they struggled to eat the leaves of high trees, their necks were extended from generation to generation.

Darwin also gave similar examples. In his book The Origin of Species, for instance, he said that some bears going into water to find food transformed themselves into whales over time.[259]

However, the laws of inheritance discovered by Gregor Mendel (1822-84) and verified by the science of genetics, which flourished in the twentieth century, utterly demolished the legend that acquired traits were passed on to subsequent generations. Thus, natural selection fell out of favor as an evolutionary mechanism.

NEO-DARWINISM AND MUTATIONS

In order to find a solution, Darwinists advanced the "Modern Synthetic Theory," or as it is more commonly known, Neo-Darwinism, at the end of the 1930s. Neo-Darwinism added mutations, which are distortions formed in the genes of living beings due to such external factors as radiation or replication errors, as the "cause of favorable variations" in addition to natural mutation.

Today, the model that stands for evolution in the world is Neo-Darwinism. The theory maintains that millions of living beings formed as a result of a process whereby numerous complex organs of these organisms (e.g., ears, eyes, lungs, and wings) underwent "mutations," that is, genetic disorders. Yet, there is an outright scientific fact that totally undermines this theory: Mutations do not cause living beings to develop; on the contrary, they are always harmful.

The reason for this is very simple: DNA has a very complex structure, and random effects can only harm it. The American geneticist B. G. Ranganathan explains this as follows:

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 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.[260]

Not surprisingly, no mutation example, which is useful, that is, which is observed to develop the genetic code, has been observed so far. All mutations have proved to be harmful. It was understood that mutation, which is presented as an "evolutionary mechanism," is actually a genetic occurrence that harms living things, and leaves them disabled. (The most common effect of mutation on human beings is cancer.) Of course, a destructive mechanism cannot be an "evolutionary mechanism." Natural selection, on the other hand, "can do nothing by itself," as Darwin also accepted. This fact shows us that there is no "evolutionary mechanism" in nature. Since no evolutionary mechanism exists, no such any imaginary process called "evolution" could have taken place.

THE FOSSIL RECORD: NO SIGN OF INTERMEDIATE FORMS

The clearest evidence that the scenario suggested by the theory of evolution did not take place is the fossil record.

According to this theory, every living species has sprung from a predecessor. A previously existing species turned into something else over time and all species have come into being in this way. In other words, this transformation proceeds gradually over millions of years.

Had this been the case, numerous intermediary species should have existed and lived within this long transformation period.

For instance, some half-fish/half-reptiles should have lived in the past which had acquired some reptilian traits in addition to the fish traits they already had. Or there should have existed some reptile-birds, which acquired some bird traits in addition to the reptilian traits they already had. Since these would be in a transitional phase, they should be disabled, defective, crippled living beings. Evolutionists refer to these imaginary creatures, which they believe to have lived in the past, as "transitional forms."

If such animals ever really existed, there should be millions and even billions of them in number and variety. More importantly, the remains of these strange creatures should be present in the fossil record. In *The Origin of Species*, Darwin 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.[261]

DARWIN'S HOPES SHATTERED

However, although evolutionists have been making strenuous efforts to find fossils since the middle of the nineteenth century all over the world, no transitional forms have yet been uncovered. All of the fossils, contrary to the evolutionists' expectations, show that life appeared on Earth all of a sudden and fully-formed.

One famous British paleontologist, Derek V. Ager, admits this fact, even though he is an evolutionist:

The point emerges that if we examine the fossil record in detail, whether at the level of orders or of species, we find – over and over again – not gradual evolution, but the sudden explosion of one group at the expense of another.[262]

This means that in the fossil record, all living species suddenly emerge as fully formed, without any intermediate forms in between. This is just the opposite of Darwin's assumptions. Also, this is very strong evidence that all living things are created. The only explanation of a living species emerging suddenly and complete in every detail without any evolutionary ancestor is that it was created. This fact is admitted also by the widely known evolutionist biologist Douglas Futuyma:

Creation and evolution, between them, exhaust the possible explanations for the origin of living things. Organisms either appeared on the earth fully developed or they did not. If they did not, they must have developed from 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.[263]

Fossils show that living beings emerged fully developed and in a perfect state on the Earth. That means that "the origin of species," contrary to Darwin's supposition, is not evolution, but creation.

THE TALE OF HUMAN EVOLUTION

The subject most often brought up by advocates of the theory of evolution is the subject of the origin of man. The Darwinist claim holds that modern man evolved from ape-like creatures. During this alleged evolutionary process, which is supposed to have started 4-5 million years ago, some "transitional forms" between modern man and his ancestors are supposed to have existed. According to this completely imaginary scenario, four basic "categories" are listed:

1. Australopithecus

2. Homo habilis

3. Homo erectus

4. Homo sapiens

Evolutionists call man's so-called first ape-like ancestors Australopithecus, which means "South African ape." These living beings are actually nothing but an old ape species that has become extinct. Extensive research done on various Australopithecus specimens by two world famous anatomists from England and the USA, namely, Lord Solly Zuckerman and Prof. Charles Oxnard, shows that these apes belonged to an ordinary ape species that became extinct and bore no resemblance to humans.[264]

Evolutionists classify the next stage of human evolution as "homo," that is "man." According to their claim, the living beings in the Homo series are more developed than *Australopithecus.* Evolutionists devise a fanciful evolution scheme by arranging different fossils of these creatures in a particular order. This scheme is imaginary because it has never been proved that there is an evolutionary relation between these different classes. Ernst Mayr, one of the twentieth century's most important evolutionists, 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."[265]

By outlining the link chain as *Australopithecus > Homo habilis > Homo erectus > Homo sapiens,* evolutionists imply that each of these species is one another's ancestor. However, recent findings of paleoanthropologists have revealed that *Australopithecus, Homo habilis,* and *Homo erectus* lived at different parts of the world at the same time.[266]

Moreover, a certain segment of humans classified as *Homo erectus* have lived up until very modern times. *Homo sapiens neandarthalensis* and *Homo sapiens sapiens* (modern man) co-existed in the same region.[267]

This situation apparently indicates the invalidity of the claim that they are ancestors of one another. Stephen Jay Gould explained this deadlock of the theory of evolution, although he was himself one of the leading advocates of evolution in the twentieth century:

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.[268]

Put briefly, the scenario of human evolution, which is "upheld" with the help of various drawings of some "half ape, half human" creatures appearing in the media and course books, that is, frankly, by means of propaganda, is nothing but a tale with no scientific foundation.

Lord Solly Zuckerman, one of the most famous and respected scientists in the U.K., who carried out research on this subject for years and studied *Australopithecus* fossils for 15 years, finally concluded, despite being an evolutionist himself, that there is, in fact, no such family tree branching out from ape-like creatures to man.

Zuckerman also made an interesting "spectrum of science" ranging from those he considered scientific to those he considered unscientific. According to Zuckerman's spectrum, the most "scientific" – that is, depending on concrete data – fields of science 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 sixth sense – and finally "human evolution." Zuckerman explains his reasoning:

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 [evolutionist] anything is possible – and where the ardent believer [in evolution] is sometimes able to believe several contradictory things at the same time.[269]

The tale of human evolution boils down to nothing but the prejudiced interpretations of some fossils unearthed by certain people, who blindly adhere to their theory.

DARWINIAN FORMULA!

Besides all the technical evidence we have dealt with so far, let us now for once, examine what kind of a superstition the evolutionists have with an example so simple as to be understood even by children:

The theory of evolution asserts that life is formed by chance. According to this claim, lifeless and unconscious atoms came together to form the cell and then they somehow formed other living things, including man. Let us think about that. When we bring together the elements that are the building-blocks of life such as carbon, phosphorus, nitrogen and potassium, only a heap is formed. No matter what treatments it undergoes, this atomic heap cannot form even a single living being. If you like, let us formulate an "experiment" on this subject and let us examine on the behalf of evolutionists what they really claim without pronouncing loudly under the name "Darwinian formula":

Let evolutionists put plenty of materials present in the composition of living things such as phosphorus, nitrogen, carbon, oxygen, iron, and magnesium into big barrels. Moreover, let them add in these barrels any material that does not exist under normal conditions, but they think as necessary. Let them add in this mixture as many amino acids and as many proteins – a

single one of which has a formation probability of 10^{-950} – as they like. Let them expose these mixtures to as much heat and moisture as they like. Let them stir these with whatever technologically developed device they like. Let them put the foremost scientists beside these barrels. Let these experts wait in turn beside these barrels for billions, and even trillions of years. Let them be free to use all kinds of conditions they believe to be necessary for a human's formation. No matter what they do, they cannot produce from these barrels a human, say a professor that examines his cell structure under the electron microscope. They cannot produce giraffes, lions, bees, canaries, horses, dolphins, roses, orchids, lilies, carnations, bananas, oranges, apples, dates, tomatoes, melons, watermelons, figs, olives, grapes, peaches, peafowls, pheasants, multicoloured butterflies, or millions of other living beings such as these. Indeed, they could not obtain even a single cell of any one of them.

Briefly, unconscious atoms cannot form the cell by coming together. They cannot take a new decision and divide this cell into two, then take other decisions and create the professors who first invent the electron microscope and then examine their own cell structure under that microscope. Matter is an unconscious, lifeless heap, and it comes to life with Allah's superior creation.

The theory of evolution, which claims the opposite, is a total fallacy completely contrary to reason. Thinking even a little bit on the claims of evolutionists discloses this reality, just as in the above example.

TECHNOLOGY IN THE EYE AND THE EAR

Another subject that remains unanswered by evolutionary theory is the excellent quality of perception in the eye and the ear.

Before passing on to the subject of the eye, let us briefly answer the question of how we see. Light rays coming from an object fall oppositely on the eye's retina. Here, these light rays are transmitted into electric signals by cells and reach a tiny spot at the back of the brain, the "center of vision." These electric signals are perceived in this center as an image after a series of processes. With this technical background, let us do some thinking.

The brain is insulated from light. That means that its inside is completely dark, and that no light reaches the place where it is located. Thus, the "center of vision" is never touched by light and may even be the darkest place you have ever known. However, you observe a luminous, bright world in this pitch darkness.

The image formed in the eye is so sharp and distinct that even the technology of the twentieth century has not been able to attain it. For instance, look at the book you are reading, your hands with which you are holding it, and then lift your head and look around you. Have you ever seen such a sharp and distinct image as this one at any other place? Even the most developed television screen produced by the greatest television producer in the world cannot provide such a sharp image for you. This is a three-dimensional, colored, and extremely sharp image. For more than 100 years, thousands of engineers have been trying to achieve this sharpness. Factories, huge premises were established, much research has been done, plans and

designs have been made for this purpose. Again, look at a TV screen and the book you hold in your hands. You will see that there is a big difference in sharpness and distinction. Moreover, the TV screen shows you a two-dimensional image, whereas with your eyes, you watch a three-dimensional perspective with depth.

For many years, tens of thousands of engineers have tried to make a three-dimensional TV and achieve the vision quality of the eye. Yes, they have made a three-dimensional television system, but it is not possible to watch it without putting on special 3-D glasses; moreover, it is only an artificial three-dimension. The background is more blurred, the foreground appears like a paper setting. Never has it been possible to produce a sharp and distinct vision like that of the eye. In both the camera and the television, there is a loss of image quality.

Evolutionists claim that the mechanism producing this sharp and distinct image has been formed by chance. Now, if somebody told you that the television in your room was formed as a result of chance, that all of its atoms just happened to come together and make up this device that produces an image, what would you think? How can atoms do what thousands of people cannot?

If a device producing a more primitive image than the eye could not have been formed by chance, then it is very evident that the eye and the image seen by the eye could not have been formed by chance. The same situation applies to the ear. The outer ear picks up the available sounds by the auricle and directs them to the middle ear, the middle ear transmits the sound vibrations by intensifying them, and the inner ear sends these vibrations to the brain by translating them into electric signals. Just as with the eye, the act of hearing finalizes in the center of hearing in the brain.

The situation in the eye is also true for the ear. That is, the brain is insulated from sound just as it is from light. It does not let any sound in. Therefore, no matter how noisy is the outside, the inside of the brain is completely silent. Nevertheless, the sharpest sounds are perceived in the brain. In your completely silent brain, you listen to symphonies, and hear all of the noises in a crowded place. However, were the sound level in your brain measured by a precise device at that moment, complete silence would be found to be prevailing there.

As is the case with imagery, decades of effort have been spent in trying to generate and reproduce sound that is faithful to the original. The results of these efforts are sound recorders, high-fidelity systems, and systems for sensing sound. Despite all of this technology and the thousands of engineers and experts who have been working on this endeavor, no sound has yet been obtained that has the same sharpness and clarity as the sound perceived by the ear. Think of the highest-quality hi-fi systems produced by the largest company in the music industry. Even in these devices, when sound is recorded some of it is lost; or when you turn on a hi-fi you always hear a hissing sound before the music starts. However, the sounds that are the products of the human body's technology are extremely sharp and clear. A human ear never perceives a sound accompanied by a hissing sound or with atmospherics as does a hi-fi; rather,

it perceives sound exactly as it is, sharp and clear. This is the way it has been since the creation of man.

So far, no man-made visual or recording apparatus has been as sensitive and successful in perceiving sensory data as are the eye and the ear. However, as far as seeing and hearing are concerned, a far greater truth lies beyond all this.

TO WHOM DOES THE CONSCIOUSNESS THAT SEES AND HEARS WITHIN THE BRAIN BELONG?

Who watches an alluring world in the brain, listens to symphonies and the twittering of birds, and smells the rose?

The stimulations coming from a person's eyes, ears, and nose travel to the brain as electro-chemical nerve impulses. In biology, physiology, and biochemistry books, you can find many details about how this image forms in the brain. However, you will never come across the most important fact: Who perceives these electro-chemical nerve impulses as images, sounds, odors, and sensory events in the brain? There is a consciousness in the brain that perceives all this without feeling any need for an eye, an ear, and a nose. To whom does this consciousness belong? Of course it does not belong to the nerves, the fat layer, and neurons comprising the brain. This is why Darwinist-materialists, who believe that everything is comprised of matter, cannot answer these questions.

For this consciousness is the spirit created by Allah, which needs neither the eye to watch the images nor the ear to hear the sounds. Furthermore, it does not need the brain to think.

Everyone who reads this explicit and scientific fact should ponder on Almighty Allah, and fear and seek refuge in Him, for He squeezes the entire universe in a pitch-dark place of a few cubic centimeters in a three-dimensional, colored, shadowy, and luminous form.

A MATERIALIST FAITH

The information we have presented so far shows us that the theory of evolution is incompatible with scientific findings. The theory's claim regarding the origin of life is inconsistent with science, the evolutionary mechanisms it proposes have no evolutionary power, and fossils demonstrate that the required intermediate forms have never existed. So, it certainly follows that the theory of evolution should be pushed aside as an unscientific idea. This is how many ideas, such as the Earth-centered universe model, have been taken out of the agenda of science throughout history.

However, the theory of evolution is kept on the agenda of science. Some people even try to represent criticisms directed against it as an "attack on science." Why?

The reason is that this theory is an indispensable dogmatic belief for some circles. These circles are blindly devoted to materialist philosophy and adopt Darwinism because it is the only materialist explanation that can be put forward to explain the workings of nature.

Interestingly enough, they also confess this fact from time to time. A well-known geneticist and an outspoken evolutionist, Richard C. Lewontin from Harvard University, confesses that he is "first and foremost a materialist and then a scientist":

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 [intervention]...[270]

These are explicit statements that Darwinism is a dogma kept alive just for the sake of adherence to materialism. This dogma maintains that there is no being save matter. Therefore, it argues that inanimate, unconscious matter created life. It insists that millions of different living species (e.g., birds, fish, giraffes, tigers, insects, trees, flowers, whales, and human beings) originated as a result of the interactions between matter such as pouring rain, lightning flashes, and so on, out of inanimate matter. This is a precept contrary both to reason and science. Yet Darwinists continue to defend it just so as "not to allow a Divine intervention."

Anyone who does not look at the origin of living beings with a materialist prejudice will see this evident truth: All living beings are works of a Creator, Who is All-Powerful, All-Wise, and All-Knowing. This Creator is Allah, Who created the whole universe from non-existence, designed it in the most perfect form, and fashioned all living beings.

THE THEORY OF EVOLUTION: THE MOST POTENT SPELL IN THE WORLD

Anyone free of prejudice and the influence of any particular ideology, who uses only his or her reason and logic, will clearly understand that belief in the theory of evolution, which brings to mind the superstitions of societies with no knowledge of science or civilization, is quite impossible.

As explained above, those who believe in the theory of evolution think that a few atoms and molecules thrown into a huge vat could produce thinking, reasoning professors and university students; such scientists as Einstein and Galileo; such artists as Humphrey Bogart, Frank Sinatra and Luciano Pavarotti; as well as antelopes, lemon trees, and carnations. Moreover, as the scientists and professors who believe in this nonsense are educated people, it is quite justifiable to speak of this theory as "the most potent spell in history." Never before has any other belief or idea so taken away peoples' powers of reason, refused to allow them to think intelligently and logically, and hidden the truth from them as if they had been blindfolded. This is an even worse and unbelievable blindness than the totem worship in some parts of Africa, the people of Saba worshipping the Sun, the tribe of Abraham (pbuh) worshipping idols they had made with their own hands, or the people of Moses (pbuh) worshipping the Golden Calf.

In fact, Allah has pointed to this lack of reason in the Qur'an. In many verses, He reveals that some peoples' minds will be closed and that they will be powerless to see the truth. Some of these verses are as follows:

As for those who do not believe, it makes no difference to them whether you warn them or do not warn them, they will not believe. Allah has sealed up their hearts and hearing and over their eyes is a blindfold. They will have a terrible punishment. (Surat al-Baqara: 6-7)

… They have hearts with which they do not understand. They have eyes with which they do not see. They have ears with which they do not hear. Such people are like cattle. No, they are even further astray! They are the unaware. (Surat al-A'raf: 179)

Even if We opened up to them a door into heaven, and they spent the day ascending through it, they would only say: "Our eyesight is befuddled! Or rather we have been put under a spell!" (Surat al-Hijr: 14-15)

Words cannot express just how astonishing it is that this spell should hold such a wide community in thrall, keep people from the truth, and not be broken for 150 years. It is understandable that one or a few people might believe in impossible scenarios and claims full of stupidity and illogicality. However, "magic" is the only possible explanation for people from all over the world believing that unconscious and lifeless atoms suddenly decided to come together and form a universe that functions with a flawless system of organization, discipline, reason, and consciousness; a planet named Earth with all of its features so perfectly suited to life; and living things full of countless complex systems.

In fact, the Qur'an relates the incident of Moses (pbuh) and Pharaoh to show that some people who support atheistic philosophies actually influence others by magic. When Pharaoh was told about the true religion, he told Prophet Moses (pbuh) to meet with his own magicians. When Moses (pbuh) did so, he told them to demonstrate their abilities first. The verses continue:

He said: "You throw." And when they threw, they cast a spell on the people's eyes and caused them to feel great fear of them. They produced an extremely powerful magic. (Surat al-A'raf: 116)

As we have seen, Pharaoh's magicians were able to deceive everyone, apart from Moses (pbuh) and those who believed in him. However, his evidence broke the spell, or "swallowed up what they had forged," as the verse puts it:

We revealed to Moses: "Throw down your staff." And it immediately swallowed up what they had forged. So the Truth took place and what they did was shown to be false. (Surat al-A'raf: 117-118)

As we can see, when people realized that a spell had been cast upon them and that what they saw was just an illusion, Pharaoh's magicians lost all credibility. In the present day too, unless those who, under the influence of a similar spell, believe in these ridiculous claims under their scientific disguise and spend their lives defending them, abandon their superstitious beliefs, they also will be humiliated when the full truth emerges and the spell is broken. In fact, world-renowned British writer and philosopher Malcolm Muggeridge, who was an atheist defending evolution for some 60 years, but who subsequently realized the truth, reveals the position in which the theory of evolution would find itself in the near future in these terms:

I myself am convinced that the theory of evolution, especially the extent to which it's been applied, will be one of the great jokes in the history books in the future. Posterity will marvel that so very flimsy and dubious an hypothesis could be accepted with the incredible credulity that it has.[271]

That future is not far off: On the contrary, people will soon see that "chance" is not a deity, and will look back on the theory of evolution as the worst deceit and the most terrible spell in the world. That spell is already rapidly beginning to be lifted from the shoulders of people all over the world. Many people who see its true face are wondering with amazement how they could ever have been taken in by it.

We have no knowledge except
what You have taught us. You are
the All-Knowing, the All-Wise."
(Surat al-Baqara, 32)

NOTES

1. Thomas E. Lovejoy, “Biodiversity: What Is It?,” Marjorie L. Reaka-Kudla, Don E. Wilson, Edward O. Wilson (editors), *Biodiversity II*, Washington D.C :Joseph Henry Press, 1997, p. 7.

2. Lee M. Spetner, *Not By Chance, Shattering The Modern Theory of Evolution,* The Judaica Press Inc., 1997, p. 175.

3. Michael Denton, “An Interview With Michael Denton,” Access Research Network, *Origins Research*, Vol: 15, No. 2, 20 July 1995; http://www.arn.org/docs/orpages/or152/dent.htm

4. John W. Oller, “A Theory In Crisis,” *Impact*, No. 180, Institute for Creation Research, June 1988. *(Emphasis added).*

5. Michael Denton, *Op cit.*

6. Robert G. Cook, *Avian Visual Cognition,* Department of Psychology Tufts University, Comparative Cognition Press, September 2001;
http://www.pigeon.psy.tufts.edu/avc/husband/avc 3dino.htm

7. “Origin of Bird Flight Explained,” *Scientific American*, January 17, 2003.

8. http://www.bsu.edu/web/00cyfisher/ origin_of_flight.htm

9. *Ibid.*

10. Sankar Chatterjee, *The Rise of Birds,* Baltimore: Johns Hopkins University Press, 1997, pp. 151-152; Phillip Burgers, Luis M. Chiappe, “The wing of *Archæopteryx* as a primary thrust generator,” *Nature*, 1999, Vol: 399, pp. 60-62.

11. Alan Feduccia, *The Origin and Evolution of Birds*, New Haven: Yale University Press, 1996, p. 98.

12. Sankar Chatterjee, *The Rise of Birds,* Baltimore: John Hopkins University Press, p. 153; Alan Feduccia, *The Origin and Evolution of Birds*, , pp. 98-101.

13. Sankar Chatterjee, Op cit., p. 153; Alan Feduccia, *Op. cit*. , p. 101.

14. John Ostrom, “Bird Flight: How Did It Begin?”, *American Scientist*, January-February 1979, No. 67, p. 47.

15. Sankar Chatterjee, *The Rise of Birds*, p. 155.

16. J. M. V. Rayner, “The Evolution of Vertebrate Flight,” *Biological Journal of the Linnean Society*, 1988, Vol. 34, p. 278.

17. *Ibid.*

18. Sankar Chatterjee, *Loc cit.*.

19. David E. Fastovsky, David B. Weishampel, *The Evolution and Extinction of the Dinosaurs,* Cambridge:,Cambridge University Press, 1996, p. 313.

20. Sankar Chatterjee, *Loc cit.*

21. W. J. Bock, “The arboreal origin of avian flight,” *Memoires of the California Academy of Sciences*, 1986, Vol. 8, p. 68.

22. John Ostrom, *“Bird Flight: How Did It Begin?”*, p. 47.

23. Robert G. Cook, *Avian Visual Cognition,* Department of Psychology Tufts University, Comparative Cognition Press, September 2001;
http://www.pigeon.psy.tufts.edu/avc/husband/avc 3dino.htm
24. David E. Fastovsky, David B. Weishampel, *The Evolution and Extinction of the Dinosaurs*, p. 313.
25. Robert L. Carroll, *Patterns and Process of Vertebrate Evolution*, New York: Cambridge University Press, 1997, p. 314.
26. P. Regal, "The Evolutionary Origin of Feathers," *The Quarterly Review of Biology,* Vol. 50, No. 1, 1975, p. 35.
27. J. Marden, "How Insects Learned to Fly?," *The Sciences*, Vol: 35, No. 6, 1975, p. 27.
28. "Bird Evolution Flies out the Window: An anatomist talks about *Archæopteryx*." David Menton with Carl Wieland; *Creation Ex Nihilo,* Vol. 16, No. 4, July-August 1994, pp. 16–19 *(Emphasis added)*
29. Kenneth P. Dial, "Wing-Assisted Incline Running and the Evolution of Flight," *Science,* Vol. 299, No. 5605, 17 January 2003, pp. 402-404.
30. Elizabeth Pennisi, "Uphill Dash May Have Led to Flight," *Science,* Vol. 299, No. 5605, January 17, 2003, p. 329
31. Kenneth P. Dial, "Wing-assisted incline running and the evolution of flight," pp. 402-404.
32. An e-mail from Alan Feduccia, September 10, 2003.
33. A. Koestler, *The Ghost in the Machine,* London, 1989, p. 127; [Conrad H. Waddington, *The Listener*", London, November, 13, 1952.
34. S. L. Olson, Open Letter to: Dr. Peter Raven, Secretary, Committee for Research and Exploration, National Geographic Society, November 1, 1999 *(Emphasis added).*
35. Discovery Channel, "The Ultimate Guide", April 21, 2003.
36. Ann Gibbons, "New Feathered Fossil Brings Dinosaurs and Birds Closer," *Science,* Vol. 274, 1996, pp. 720-721
37. Jonathan Sarfati, *Refuting Evolution: A Response to the National Academy of Sciences,* "Teaching About Evolution and the Nature of Science, "Master Books, ABD, 1999, p. 63.
38. Gordon Rattray Taylor, *The Great Evolution Mystery,* London: Abacus, 1983, pp. 70-71.
39. Henry Gee, *In Search of Deep Time: Beyond the Fossil Record to a New History of Life,* Comstock Publishing Assoc., USA, 1999, p. 172.
40. Duane T. Gish, *Dinosaurs by Design,* Master Books, 1996, pp. 65-66.
41. A. C. Burke, A. Feduccia, "Developmental Patterns and the Identification of Homologies in the Avian Hand," *Science*, Vol. 278, no. 5338, October, 24 1997, pp. 666-668.
42. *The Cincinnati Enquirer*, October 25, 1997 *(Emphasis added).*
43. Pat Shipman, "Birds Do It . . . Did Dinosaurs?", New Scientist, February 1, 1997, p. 28 *(Emphasis added).*
44. *Ibid.*
45. Henry Gee, *In Search of Deep Time: Beyond the Fossil Record to a New History of Life*, p. 172.

46. http://www.birdsnways.com/wisdom/ ww43eiv.htm
47. http://www.wbu.com/edu/migr.htm
48. Michael Denton, *A Theory in Crisis,* Adler & Adler, 1986, pp. 210-211.
49. *Ibid*., pp. 211-212 *(Emphasis added).*
50. Michael J. Denton, "An Interview with Michael Denton," Access Research Network, Origins Research, Vol. 15, No. 2, July 20, 1995; http://www.arn.org/docs/orpages/or152/dent.htm *(Emphasis added).*
51. J. A. Ruben, T. D. Jones, N. R. Geist, W. J Hillenius, "Lung Structure And Ventilation in Theropod Dinosaurs and Early Birds," *Science,* Vol.: 278, No. 5341, November 14, 1997, p. 1267.
52. Michael J. Denton, *Nature's Destiny*, New York: The Free Press, , 1998, p. 361.
53. *Ibid.*, pp.361-362.
54. J. A. Ruben, T.D. Jones, N.R. Geist, W.J Hillenius, "Lung Structure And Ventilation in Theropod Dinosaurs and Early Birds," *Science*, Vol.: 278, No. 5341, November 14, 1997, pp. 1267-1270.
55. Jonathan Sarfati, *Refuting Evolution: A Response to the National Academy of Sciences, Teaching About Evolution and the Nature of Science,* Master Books, USA, 1999, p. 64; Richard Dawkins, Climbing Mount Improbable, Penguin Books, , 1996, p. 113.
56. A. H. Brush, "On the Origin of Feathers," *Journal of Evolutionary Biology,* Vol: 9, 1996, p. 132.
57. Alan Feduccia, *The Origin and Evolution of Birds*, New Haven: Yale University Press, 1996, p. 130.
58. Ernst Mayr, *Systematics and The Origin Of Species,* New York: Dove Press, , 1964, p. 296.
59. A. C. Lucas, P. R. Slettenhein, *Avian Anatomy: Integument,* GPO, Washington, D.C., 1972.
60. A. H. Brush, "On the origin of feathers," *Journal of Evolutionary Biology*, pp. 131-142.
61. "Bird Evolution Flies out the Window: An anatomist talks about *Archæopteryx:*" David Menton with Carl Wieland, *Creation Ex Nihilo,* Vol. 16, No. 4, July-August 1994, pp. 16-19.
62. Xing Xu, Zhi-Lu Tang, Xiao-Lin Wang, "A therizinosauroid dinosaur with integumentary structures from China," *Nature*, Vol. 399, 1999, pp. 350-354 (Emphasis added).
63. W. E. Swinton, "The Origin of Birds," *Biology and Comparative Physiology of Birds,* Ed. A. J. Marshall, New York: Academic Press, , 1960.(Emphasis added).
64. W. J. Bock, "Explanatory History of the Origin of Feathers," *American Zoology*, Vol. 40, Sep. 2000, p. 480.
65. Barbara J. Stahl, *Vertebrate History: Problems in Evolution*, New York: Dover Publications, , 1985, pp. 349-350 (Emphasis added).
66. *Ibid. (Emphasis added).*
67. Larry Martin, S. A. Czerkas, "The Fossil Record of Feather Evolution in the Mesozoic," *American Zoologist*, Vol. 40, Sep.2000, p. 687.
68. "Bird Evolution Flies out the Window", Carl Wieland, *Creation Ex Nihilo*, Vol. 16, Issue: 4, July-August 1994, pp. 16-19.

69. K. Parkes, “Speculations on the Origin of Feathers,” *Living Bird,* Vol. 5, 1966, p. 77.
70. W. P. Pycraft, “Animal Life: an Evolutionary Natural History,” *A History of Birds*, Vol .2, Methuen, London, p. 39.
71. Larry Martin, S. A. Czerkas, “"The Fossil Record of Feather Evolution in the Mesozoic,” *American Zoologist*, p. 687.
72. Richard O. Prum, Alan H. Brush, “Which Came First the Feather or the Bird?”, *Scientific American*, March 2003, pp. 84-93 *(Emphasis added).*
73. K. Parkes, “Speculations on the Origin of Feathers,” *Living Bird,* p. 77.
74. W. P. Pycraft, “Animal Life: an Evolutionary Natural History,” *A History of Birds,* Vol. 2, Methuen, London, p. 39.
75. Alan Feduccia, “On Why Dinosaurs Lacked Feathers,” *The Beginning of Birds,* Eichstatt, West Germany, Jura Museum, 1985, p. 76 *(Emphasis added).*
76. Ann Gibbons, “Plucking the Feathered Dinosaur,: *Science*, Vol. 278, Issue. 5341, 14 November 1997, pp. 1229-1230.
77. *Ibid.*
78. Alan Feduccia, *The Origin and Evolution of Birds,* Yale University Press, 1999, p. 130.
79. *Ibid*., p.132.
80. A. H. Brush, “On the Origin of Feathers,” *Journal of Evolutionary Biology*, Vol. 9, 1996, p. 132
81. Richard O. Prum, “Development and Evolutionary Origin of Feathers,” *Journal of. Experimental Zoology*, Vol. 285, p. 292.
82. David Menton, “Bird evolution flies out the window,” *Creation*, pp. 16-19.
83. Ann Gibbons, “New Feathered Fossil Brings Dinosaurs and Birds Closer,” *Science*, Vol .274, 1 November 1996.
84. Douglas Palmer, “Learning to Fly,” *New Scientist*, Vol. 153, 1 March 1997, p. 44 (Emphasis added).
85. Alan Feduccia, *The Origin and Evolution of Birds,* New Haven: Yale University Press, , 1996, p. 130.
86. Richard Dawkins, River Out of Eden, New York: Basic Books, 1995, p. 83 (Emphasis added).
87. Daniel C. Dennett, *Darwin's Dangerous Idea,* New York: Simon & Schuster, , 1996, pp. 59-60 (Emphasis added).
88. *Ibid*.
89. Engin Korur, “Gözlerin ve Kanatların Sırrı [The Secret of Eyes and Wings],” *Bilim ve Teknik*, No. 203, October 1984, p. 25.
90. S. J. Gould, *The Panda's Thumb*, W. W. Norton & Company (August 1992), p.189 *(Emphasis added).*
91. Richard Milton, *Son Tartışmalar Işığında Darwinizm'in Mitleri,* (Shattering the Myths of Darwinism) Gelenek Publishing House, September 2003, translated by: İbrahim Kapaklıkaya, p. 202.

92. Colin J. Pennycuick, *Bird Flight Performance,* Oxford University Press, 1989.
93. “Flying High, An interview with Dr. Andy McIntosh;” http://www.answersingenesis.org /creation/v20/i2/flying_high.asp
94. “"New Study Suggests Missing Link That Explains How Dinosaurs Learned To Fly,” 17 January 2003;http://www.sciencedaily.com/releases/2003/01/030117081305.htm
95. “Kusursuz Uçuş Makineleri,” [Flawless Flying Machines] *Blim ve Teknik*, No. 136, March 1979, p. 21.
96. Jonathan Sarfati, *Refuting Evolution: A Response to the National Academy of Sciences, Teaching About Evolution and the Nature of Science*, Master Books, USA, 1999, p. 61.
97. David Williamson, “"Scientist Says Ostrich Study Confirms Bird ‘Hands'’ Unlike Those Of Dinosaurs,” EurekAlert, 14 August 2002; http://www.eurekalert.org/pub_releases/2002-08/uonc-sso081402.ph *(Emphasis added).*
98. *Ibid.*
99. A. C. Burke, A. Feduccia, “Developmental Patterns and the Identification of Homologies in the Avian Hand,” *Science*, Vol. 278, Issue. 5338, 24 October 1997, pp. 666-668.
100. Jonathan Knight, “Dinosaur theory put to flight: Birds may not be descended from the ancient reptiles after all,” *New Scientist*, 1 November 1997.
101. *Ibid.*
102. Alan Feduccia, “Birds are Dinosaurs: Simple Answer to a Complex Problem,” *The Auk,* Vol. 119, Issue. 4, October 2002, pp. 1187-1201(Emphasis added).
103. David Williamson, “Scientist says ostrich study confirms bird hands unlike those of dinosaurs,” *Eurek Alert*, 14 August 2002; http://www.eurekalert.org/pub_releases/ 2002-08/uonc-sso081402.php
104. V. Morell, “A Cold, Hard Look at Dinosaurs,” *Discover*, Vol. 17, Issue. 12, 1996, pp. 98-108.
105. http://www.sciam.com/askexpert_question.cfm?articleID=00084771-7316-1C72-9EB7809EC588F2D7&sc=I100322 *(Emphasis added).*
106. P. Dodson, “Mesozoic Feathers and Fluff,” *American Paleontologist,* Vol. 9, Issue. 1, 2001, p. 7 *(Emphasis added).*
107. http://www.sciam.com/askexpert_question.cfm?articleID=00084771-7316-1C72-9EB7809EC588F2D7&sc=I100322
108. A. Elzanowski, “A comparison of the jaw skeleton in theropods and birds, with a description of the palate in the Oviraptoridae,” *Smithsonian Contributions to Paleobiology,* Vol. 89, 1999, pp. 311-323.
109. Henry Gee, *In Search of Deep Time: Beyond the Fossil Record to a New History of Life,* Comstock Publishing Assoc., 1999, P. 172.
110. *Ibid.*
111. Arthur Koestler, *Janus: A Summing Up,* London: Picador Books, 1983, p. 175.
112. Richard Milton, *Shattering the Myths of Darwinism,* Rochester, Vermont: Park Street Press, , 1997, p. 1.

113. *Nature,* Vol. 382, 1 August 1996, p. 401.
114. Carl O. Dunbar, *Historical Geology,* New York: John Wiley and Sons, 1961, p. 310.
115. Richard L. Deem, "Demise of the 'Birds are Dinosaurs''Theory;" http://www.direct.ca/trinity/dinobird.htm
116. Richard Milton, "Son Tartışmalar Işığında Darwinizm'in Mitleri, [Shattering the Myths of Darwinism] " Gelenek Publishing House, September 2003, translated by: İbrahim Kapaklıkaya, p. 139.
117. Alan Feduccia, "*Archæopteryx:* Early Bird Catches a Can of Worms," Science, Vol. 259, Issue. 5096, 5 February 1993, pp. 764-765.
118. John Ostrom, "Bird Flight: How Did It Begin?", *American Scientist*, No. 67, January-February 1979, p. 47.
119. Colin Patterson, *Darwin's Enigma: Fossils and Other Problems,* El Cajon, CA: Master Book Publishers, , 4. Edition, 1988, p. 89 *(Emphasis added).*
120. Alan Feduccia, "Birds are Dinosaurs: Simple Answer to a Complex Problem," *The Auk*, Vol. 119, No. 4, October 2002, pp. 1187-1201.
121. Alan Feduccia, *The Origin and Evolution of Birds,* Yale University Press, 1999, p. 81 *(Emphasis added).*
122. "Bird Evolution Flies out the Window: An anatomist talks about *Archæopteryx"*: David Menton with Carl Wieland, *Creation Ex Nihilo,* Vol. 16, No. 4, July-August 1994, pp. 16-19.
123. *Nature*, Vol. 382, 1 August 1996, p. 401.
124. *Ibid.*
125. Storrs L. Olson, Alan Feduccia, "Flight Capability and the Pectoral Girdle of *Archæopteryx*," *Nature*, No. 278, 15 March 1979, p. 248.
126. Carl O. Dunbar, *Historical Geology,* New York: John Wiley and Sons, 1961, p. 310.
127. Robert L. Carroll, *Patterns and Processes of Vertebrate Evolution,* Cambridge University Press, 1997, pp. 280-81.
128. E. Olsen, A. Feduccia, "Flight Capability and the Pectoral Girdle of *Archæopteryx*," Nature, 1979, p. 248.
129. "Bird Evolution Flies out the Window," pp. 16-19.
130. Alan Feduccia, Harrison B. Tordoff, "Feathers of *Archæopteryx:* Asymmetric Vanes Indicate Aerodynamic Function," *Science*, Vol. 203, 9 March 1979, p. 1021.
131. Luther D. Sunderland, *Darwin's Enigma,* Master Book Publishers, , 1988, pp. 74-75.
132. "Bird Evolution Flies out the Window," pp. 16-19.
133. L. D. Martin, J. D. Stewart, K. N. Whetstone, *The Auk*, Vol. 98, 1980, p. 86.
134. S. Tarsitano, M. K. Hecht, *Zoological Journal of the Linnaean Society,* Vol. 69, 1985, p. 178; A. D. Walker, Geological Magazine, Vol. 177, 1980, p. 595.
135. B. Haubitz, M. Prokop, W. Döhring, J. H. Ostrom, P. Welinhofer, *Paleobiology*, Vol. 14, No. 2, 1988, p. 206.
136. Richard Hinchliffe, "The Forward March of the Bird-Dinosaurs Halted?," *Science*, Vol. 278, 24 October 1997, pp. 596-597.

137. *Ibid.*
138. *Ibid.*
139. L. D. Martin, J. D. Stewart, K. N. Whetstone, *The Auk*, Vol. 98, 1980, p. 86; L. D. Martin, "Origins of Higher Groups of Tetrapods,", Ithaca, New York: Comstock Publishing Association, 1991, pp. 485, 540.
140. "Bird Evolution Flies out the Window."
141. A. D. Walker, *Geological Magazine*, Vol. 117, 1980, p. 595.
142. "Bird Evolution Flies out the Window"
143. "Early Bird Had the Brains to Fly," *Scientific American*, Science News, 5 August 2004.
144. Jacqueline Ali, "Bird brain reveals flight secrets," BBC News Online; http://news.bbc.co.uk/2/hi/science/nature/3535272.stm
145. *Ibid.*
146. Jonathan Wells, *Icons of Evolution*, Regnery Publishing, 2000, p. 117.
147. Richard Hinchliffe, "The Forward March of the Bird-Dinosaurs Halted?," *Science*, Vol 278, No. 5338, 24 October 1997, pp.. 596-597.
148. Richard L. Deem, "Demise of the 'Birds are Dinosaurs' Theory;" http://www.yfiles.com/dinobird2.html *(Emphasis added).*
149. S. L. Olson, Alan Feduccia, *Nature*, Vol. 278, 1979, p. 247.
150. "The Oldest Fossil Bird: A Rival for *Archæopteryx*," *Science*, Vol. 199, 20 January 1978, p. 284.
151. "Bird Evolution Flies out the Window."
152. http://www.bc.edu/bc_org/avp/law/lwsch/journals/bciclr/23_2/02_TXT.htm; The Confuciusornis Sanctus: An Examination of Chinese Cultural Property Law and Policy in Action, by Anne Carlisle Schmidt
153. Cited June 24, 1998, CNN website www.cnn.com
154. Jeff Hecht, "Piltdown Bird," *New Scientist*, Vol. 165, No. 2223, 29 January 2000, p. 12.
155. "Dino-Kuş Palavra Çıktı," [Dino-Bird is a Fairy-Tale], *Hürriyet*, 29 March 2001.
156. Xu Xing, "Response to 'Feathers for T. rex?'," *National Geographic*, Vol. 197, No. 3, March 2000.
157. Jeff Hecht, "Piltdown bird," *New Scientist*, Vol. 165, No. 2223, 29 January 2000, p. 12.
158. *Ibid.*
159. "Open Letter: Smithsonian decries *National Geographic's* 'editorial propagandizing' of dinosaur-to-bird evolution"; http://www. trueorigin.org/birdevoletter.asp
160. Tim Friend, "Dinosaur-bird link smashed in fossil flap," USA Today, 25 January 2000 *(Emphasis added).*
161. Alan Feduccia, "Plucking Apart the Dino-Birds," Discover, February 2003, Vol. 24, No. 2 *(Emphasis added).*
162. Jeff Hecht, "F is for Fake: Only an X-ray will stamp your fossil bargain as authentic," *New Scientist*, 19 Feb., 2000.
163. *Ibid.*

164. *Ibid. (Emphasis added).*
165. "Scientist disputes fossil is 'missing link' between dinosaurs," Brunswickan Publishing, The Associated Press, 1999; http://www.unb.ca/web/bruns/9900/issue16/sciencetech/missinglink.html *(emphasis added)*
166. Jeff Hecht, "Psst . . . wanna Triceratops?," *New Scientist,* Vol. 152, No. 2060, 14 December 1996, p. 12.
167. Jeff Hecht, "F is for Fake: Only an X-ray will stamp your fossil bargain as authentic," *New Scientist,* 19 Feb., 2000.
168. Jeff Hecht, "Psst . . . wanna Triceratops?," *New Scientist.*
169. Alan Feduccia, J. David', e-mail, 26 October 1999; http://www.answersingenesis.org/docs/4208news2-3-2000.asp *(Emphasis added).*
170. Scott F. Gilbert, "Did Birds Evolve from the Dinosaurs?," *Developmental Biology, 6th edition,* Ch. 16.4; http://www.devbio.com/article.php?ch=16&id=161
171. "Case of the Flying Dinosaur," NOVA, Boston Video, 1991.
172. Peter Dodson, "Mesozoic Feathers and Fluff," *American Paleontologist,* 2001, Vol. 9, No. 1, p. 7.
173. Peter Dodson, "Response by Peter Dodson," *American Paleontologist,* 2001, Vol. 9, No. 4, pp. 13-14.
174. Alan Feduccia, "Birds are Dinosaurs: Simple Answer to a Complex Problem," *The Auk,* Vol. 119, No. 4, October 2002, pp. 1187-1201 *(Emphasis added).*
175. *Ibid.*
176. *Ibid.(Emphasis added).*
177. *Ibid.*
178. *Ibid. (Emphasis added).*
179. *Ibid.*
180. Peter Dodson, "Origin of Birds: The Final Solution?," *American Zoologist,* Vol. 40, 2000, pp. 505-506.
181. Richard Monastersky, "A Clawed Wonder Unearthed in Mongolia," *Science News,* Vol. 143, 17 April 1993, p. 245.
182. Cynthia Reynolds, "New dinosaur find: missing link between dinos and birds?," 21 March 2000; http://exn.ca/Templates/Story.asp?ID=2000032156
183. "Ancient Feathered Animal Challenges Dinosaur-Bird Link," 26 June 2000; http://www.sciencedaily.com/releases/2000/06/000625231641.htm
184. Alan Feduccia, e-mail message.12 November 2003,
185. Pat Shipman, "Birds do it . . . Did Dinosaurs?," *New Scientist,* 1 February 1997, p. 31.
186. Ann Gibbons, "Dinosaur Fossils, in Fine Feather, Show Link to Birds," *Science,* Vol. 280, 1998, p. 2051; Jennifer Ackerman, "Dinosaurs Take Wing," National Geographic, Vol. 194, 1998, pp. 86-89; D. M. Unwin, "Feathers, filaments and theropod dinosaurs," Nature, Vol. 391, 1998, p. 120.

187. Ji, Qiang, Philip J. Currie, Mark A. Norell, Ji Shu-An, "Two feathered dinosaurs from northeastern China," *Nature*, Vol. 393, 1998, pp. 753-761; Jennifer Ackerman, "Dinosaurs Take Wing," *National Geographic*, Vol. 194, 1998, pp. 86-89; David E. Fastovsky, David B. Weishampel, *The Evolution and Extinction of the Dinosaurs*, Cambridge: Cambridge University Press, 1996, pp. 261, 271-272; Robert L. Carroll, *Vertebrate Paleontology and Evolution*, New York: W. H. Freeman, 1988.

188. Michael D. Lemonick, "Dinosaurs of a Feather," *Time*, 6 July 1998, p. 83.

189. Ann Gibbons, "Dinosaur Fossils, in Fine Feather, Show Link to Birds," *Science*, 1998, Vol. 280, p. 2051; R. Monastersky, "Feathered Dinosaurs Found in China," *Science News*, 1998, Vol. 153, p. 404; Kevin Padian, "When is a bird not a bird?," *Nature*, Vol. 393, 1998, p. 730; Chen Pei-ji, Zhi-ming Dong, Shuo-nan Zhen, "An exceptionally well-preserved theropod dinosaur from the Yixian Formation of China," *Nature*, Col. 391, 1998, pp. 151-152; Jennifer Ackerman, "Dinosaurs Take Wing," *National Geographic*, Vol. 194, 1998, p. 90.

190. Alan Feduccia, "1,2,3 = 2,3,4: Accommodating the cladogram," *Proceedings of National Academy of Sciences*, Vol. 96, No. 9, 27 April 1999, pp. 4740-4742.

191. http://www.answersingenesis.org/
docs2002/1126dinosaur.asp; [David Anderson, Scott Eberhardt, "A Physical Description of Flight"; http://www.aa.washington.edu/faculty/eberhardt/lift.htm]

192. David E. Fastovsky, David B. Weishampel, *The Evolution and Extinction of the Dinosaurs*, Cambridge: Cambridge University Press, , 1996, pp. 261, 284-287.

193. Ji Qiang, Philip J. Currie, Mark A. Norell, Ji Shu-An, "Two feathered dinosaurs from northeastern China," *Nature*, Vol. 393, 1998, p. 759; David E. Fastovsky, David B. Weishampel, *The Evolution and Extinction of the Dinosaurs*, Cambridge: Cambridge University Press, Cambridge, 1996, p. 435; Alan Feduccia, *The Origin and Evolution of Birds*, New Haven: Yale University Press, 1996, pp. 5, 281-282.

194. David E. Fastovsky, David B. Weishampel, *The Evolution and Extinction of the Dinosaurs*, pp. 125, 182, 254-255.

195. Ann Gibbons, "Plucking the Feathered Dinosaur," *Science*, Vol. 278, No. 5341, 14 November 1997, p. 1229-1230 *(Emphasis added).*

196. *Ibid.*

197. Pat Shipman, "Birds Do It . . . Did Dinosaurs?," *New Scientist*, p. 28.

198. Luis M. Chiappe, "Wings over Spain," *Natural History*, Spain, September 1998.

199. *Ibid.*

200. F. E. Novas, P. F. Puerta, "New evidence concerning avian origins from the Late Creataceous of Patagonia," *Nature*, Vol.. 387, No. 6631, 1997, pp. 390-392.

201. Corey S. Powell, "It's a Bird, It's a . . . Dinosaur?," *Scientific American*, 23 June 1997.

202. Alan Feduccia, "Evidence from Claw Geometry Indicating Arboreal Habits of *Archæopteryx*," Science, Vol. 259, pp. 790-793.

203. Lianhai Hou, Larry D. Martin, Zhonghe Zhou, Alan Feduccia, “Early Adaptive Radiation of Birds: Evidence from Fossils from Northeastern China,” *Science*, 15 November 1996, Vol. 274, No. 5290, pp. 1164-1167.
204. S. J. Gould, N. Eldredge, *Paleobiology*, Vol. 3, 1977, p. 147.
205. David Williamson, “Scientist says ostrich study confirms bird ‘hands’ unlike those of dinosaurs,” *EurekAlert*, 14 August 2002; http://www.eurekalert.org/pub_releases/2002-08/uonc-sso081402.php
206. Henry Gee, “Early bird ate seeds,” *Nature*, 25 July 2002.
207. http://www.jpinstitute.com/news/jns_
new_bird_find.jsp
208. Alan Feduccia, *The Origin and Evolution of Birds*, 2nd Edition, New Haven: Yale University Press, 1999.
209. Ann Gibbons, “Plucking the Feathered Dinosaur,” *Science*, Vol. 278, 14 November 1997, p. 1229.
210. Xu, X., Zhou, Z., Kuang, X., Zhang, F., Du, X., “Four winged dinosaurs from China,” *Nature*, Vol. 421, 2003, pp. 335-339.
211. Justin Costa Rica, “*Microraptor gui*: Bird or Dinosaur? A look into the therapod dinosaur-bird evolution debate;” http://www.ndsu.nodak.edu/instruct/ashworth/webpages/g491 /2003presentations/justin costarica/Seminar.htm
212. David Williamson, “Scientist says ostrich study confirms bird ‘hands' unlike those of dinosaurs,” *EurekAlert*, http://www.eurekalert.org/pub_releases/ 2002-08/uonc-sso081402.php
213. Pat Shipman, “Birds Do It . . . Did Dinosaurs?," *New Scientist*, p. 28.
214. Christopher P. Sloan, “The Lord of the Wings,” *National Geographic*, May 2003.
215. Kevin Padian, “Four-Winged Dinosaurs, Bird Precursors, or Neither?.” *BioScience*, Vol. 53, No. 5, pp. 450-452.
216. *Ibid.*
217. Henry Gee, “Fossil boosts trees-down start for flight,” *Nature*, Science Update, 23 January 2003.
218. Alan Feduccia, *The Origin and Evolution of Birds*, 1996, p. viii.
219. *Ibid*. p.132.
220. Erik Stokstad, “How Pterosaurs Terrorized the Skies,” *Science*, 29 October 2003.
221. “X-rays reveal pterosaurs’ aerial expertise,” *New Scientist*, 29 October 2003
222. Paul C. Sereno, “The evolution of dinosaurs,” *Science*, Vol. 284, No. 5423, 25 July 1999, pp. 2137-2147.
223. Duane T. Gish, *Evolution: The Fossils Still Say No*, ICR, San Diego, 1998, p. 103 (Emphasis added).
224. Robert L. Carroll, *Vertebrate Paleontology and Evolution*, p. 336.
225. Pierre P. Grassé, *Evolution of Living Organisms*, New York: Academic Press, , 1977, p. 30.
226. M. Kusinitz, *Science World*, 4 February 1983, p. 19.

227. New York Times Press Service, *San Diego Union*, 29 May 1983; W. A. Shear, *Science*, Vol. 224, 1984, p. 494 *(Emphasis added)*,
228. R. J. Wootton, C. P. Ellington, "Biomechanics & the Origin of Insect Flight," *Biomechanics in Evolution,* Ed. J. M. V. Rayner & R. J. Wootton, Cambridge: Cambridge University Press, , 1991, p. 99.
229. Jeremy Thomson, "How Flies Fly," *Nature*, 22 August 2001; http://www.nature.com/ nsu/ nsu_pf/010823/010823-10.htm
230. Michael Dickinson, "Solving the Mystery of Insect Flight," *Scientific American*, June 2001; http://www. sciam. com/2001/0601issue/0601dickinson.html
231. *Ibid.*
232. *Ibid.*
233. "Sinekler Nasıl Uçar?," *Hürriyet Bilim* magazine, 22 March 2003.
234. http://wings.avkids.com/Book/ Animals/instructor/insects-01.html
235. Michael F. Whiting, Sven Bradler, Taylor Maxwell, "Loss and recovery of wings in stick insects." *Nature*, Vol. 421, 16 January 2003, pp. 264-267.
236. Nicola Jones, "Stick insect forces evolutionary rethink," *New Scientist*, 15 January 2003; http://www.newscientist.com/article.ns?id=
dn3269
237. Susan Milius, "Retaking Flight: Some insects that didn't use it didn't lose it," *Science News*, Vol. 163, No. 3, 18 January 2003, p. 35.
238. "Sinekler Nasıl Uçar," *Hürriyet Bilim* magazine, 22 March 2003.
239. Robin J. Wootton, "The Mechanical Design of Insect Wings," *Scientific American*, Vol. 263, November 1990, p. 120.
240. Kimberly Patch, "Butterflies offer lessons for robots," Technology Research News, 12-19 February 2003,
http://www.trnmag.com/Stories/2003/021203/
Butterflies_offer_lessons_for_robots_021203.html
241. *Ibid.*
242. *Ibid.*
243. John Toon, "Flying on Mars: Nature's flight system could be the key to exploring the newest frontier," *Research Horizons*, 12 November 2001;
http://gtresearchnews.gatech.edu/reshor/rh-f01/mars.html
244. David E. H. Jones, "The insect plane," *Nature*, Vol. 400, 5 August 1999, p. 513 *(Emphasis added).*
245. Andrew Bridges, *Associated Press,* 28 July 2002;
http://www.augustachronicle.com/stories/
072802/tec_124-3110.shtml
246. *Ibid.*
247. *Ibid.*
248. *Ibid.*

249. *Ibid.*
250. *Ibid.*
251. Larry Witham, "Sue makes debut in latest attack of dino-mania," *The Washington Times,* 16 July 2000. *(Emphasis added)*
252. Sidney Fox, Klaus Dose, *Molecular Evolution and The Origin of Life*, W.H. Freeman and Company, San Francisco, 1972, p. 4.
253. Alexander I. Oparin, *Origin of Life*, Dover Publications, NewYork, 1936, 1953 (reprint), p. 196.
254. "New Evidence on Evolution of Early Atmosphere and Life", Bulletin of the American Meteorological Society, vol 63, November 1982, 1328-1330.
255. Stanley Miller, Molecular Evolution of Life: Current Status of the Prebiotic Synthesis of Small Molecules, 1986, p. 7.
256. Jeffrey Bada, *Earth*, February 1998, p. 40.
257. Leslie E. Orgel, "The Origin of Life on Earth", *Scientific American*, vol. 271, October 1994, p. 78.
258. Charles Darwin, *The Origin of Species by Means of Natural Selection*, The Modern Library, New York, p. 127.
259. Charles Darwin, *The Origin of Species: A Facsimile of the First Edition*, Harvard University Press, 1964, p. 184.
260. B. G. Ranganathan, *Origins?*, Pennsylvania: The Banner Of Truth Trust, 1988, p. 7.
261. Darwin, *The Origin of Species: A Facsimile of the First Edition*, p. 179.
262. Derek A. Ager, "The Nature of the Fossil Record," *Proceedings of the British Geological Association*, vol 87, 1976, p. 133.
263. Douglas J. Futuyma, *Science on Trial*, Pantheon Books, New York, 1983, p. 197.
264. Solly Zuckerman, *Beyond The Ivory Tower*, Toplinger Publications, New York, 1970, pp. 75-14; Charles E. Oxnard, "The Place of Australopithecines in Human Evolution: Grounds for Doubt," *Nature*, vol 258, p. 389.
265. "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.
266. Alan Walker, *Science*, vol. 207, 7 March 1980, p. 1103; A. J. Kelso, *Physical Antropology*, 1st ed., J. B. Lipincott Co., New York, 1970, p. 221; M. D. Leakey, *Olduvai Gorge*, vol. 03, Cambridge University Press, Cambridge, 1971, p. 272.
267. 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.
268. S. J. Gould, *Natural History*, vol. 85, 1976, p. 30.
269. Zuckerman, *Beyond The Ivory Tower*, p. 19.
270. Richard Lewontin, "The Demon-Haunted World," *The New York Review of Books*, January 9, 1997, p. 28.

271. Malcolm Muggeridge, *The End of Christendom*, Grand Rapids:Eerdmans, 1980, p. 43.78. Sidney Fox, Klaus Dose, *Molecular Evolution and The Origin of Life*, W.H. Freeman and Company, San Francisco, 1972, p. 4