

The Myth of Bird Evolution

H A R U N Y A H Y A

Recently, a 140-million-year-old fossil called *Shenzhouraptor sinensis* was discovered in the Yixian region of China. According to the evolutionary paleontologist Ji Qiang, this fossil was a missing link between dinosaurs and birds. The fact is, however, that this fossil possesses features that clash with the evolutionists' claims about the origin of birds. Not just this fossil, but also the whole body of paleontological data on the subject is at odds with the evolutionary theory. "The evolution of birds", like other claims made by Darwinism, is no more scientific than a fairy tale.

SHENZHOURAPTOR SINENSIS, THE IMPOSSIBLE TRANSITIONAL FORM

Evolutionists suggest that *Shenzhouraptor sinensis* was a transitional form that was able to fly and possessed both bird and dinosaur characteristics. This is, however, in contradiction to other evolutionist claims on the origin of birds.

Archaeopteryx, the oldest known bird, lived 150 million years ago and is in many respects no different from flying birds living today. *Shenzhouraptor sinensis*, however, lived 140 million years ago, making it younger than *Archaeopteryx*. For that reason, it is impossible for it to be a transitional form, because birds with perfect feathers and the necessary anatomical structure for flight were living before it.

At this point, we need to make it clear that the evolutionist claims regarding *Archaeopteryx*, one of the principle icons of the theory of evolution for the last 100 years or so, have lost a great deal of their validity. It has been realized that this creature was a flying bird, possessing a flawless flight mechanism. Attempts to compare *Archaeopteryx* to a reptile have failed entirely.

As Alan Feduccia, one of the leading ornithologists in the world, has stated, "Most recent workers who have studied various anatomical features of *Archaeopteryx* have found the creature to be much more birdlike than previously imagined," and "the resemblance of *Archaeopteryx* to theropod dinosaurs has been grossly overestimated." (1)

Another problem regarding *Archaeopteryx* is that the theropod dinosaurs, which many evolutionists suggest were *Archaeopteryx*' ancestors, actually emerge after it in the fossil record, not before it. This, of course, leaves no room for any "evolutionary family tree" to account for the origin of birds.



Archaeopteryx: Recent work shows it to be "much more birdlike than previously imagined".

THE SQUABBLING EVOLUTIONISTS

The reason for the "dino-bird" and "feathered dinosaur" stories that frequently appear in the evolutionist press is simply an effort on their part to show that their claim that birds evolved from dinosaurs has been proven by fossil discoveries. The fact is, however, that none of these fossils has offered any scientific evidence at all for that claim. What is more, many evolutionists do not believe it either. For instance, renowned ornithologists Alan Feduccia and Larry Martin believe that it is totally an erroneous scenario. A college textbook, *Developmental Biology* reads:

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. (2)

Feduccia has this to say regarding the thesis of reptile-bird evolution:

Well, I've studied bird skulls for 25 years and I don't see any similarities whatsoever. I just don't see it... The theropod origins of birds, in my opinion, will be the greatest embarrassment of paleontology of the 20th century. (3)

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

To tell you the truth, if I had to support the dinosaur origin of birds with those characters, I'd be embarrassed every time I had to get up and talk about it. (4)

The disagreement amongst evolutionists themselves stems from the fact that there is no evidence supporting an evolutionary origin for birds. They can only build up speculations, just-so stories which are imposed on the public, misleadingly, as "scientific theories".

THE SIGNIFICANT STRUCTURAL DIFFERENCES BETWEEN BIRDS AND DINOSAURS

Most evolutionists hold that birds evolved from small theropod dinosaurs. However, a comparison between birds and such reptiles reveals that the two have very distinct features, making it unlikely that one evolved from the other.

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

Another difference between reptiles and birds is their metabolic structure. Reptiles have the slowest metabolic structure in the animal kingdom. (The claim that dinosaurs had a warm-blooded fast metabolism remains a speculation.) Birds, on the other hand, are at the opposite end of the metabolic spectrum. For instance, the body temperature of a sparrow can rise to as much as 48°C (118°F) due to its fast metabolism. On the other hand, reptiles lack the ability to regulate their body temperature. Instead, they expose their bodies to sunlight in order to warm up. Put simply, reptiles consume the least energy of all animals and birds the most.

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

In some popular evolutionist publications, for instance, emphasis is laid on the differences among dinosaur hip bones to support the thesis that birds are descended from dinosaurs. These differences exist between dinosaurs classified as *Saurischian* (reptile-like, hip-girdled dinosaurs) and *Ornithischian* (bird-like, hip-girdled dinosaurs). This concept of dinosaurs having hip girdles similar to those of birds is sometimes wrongly conceived as evidence for the alleged dinosaur-bird link. However, the difference in hip girdles is no evidence at all for the claim that birds evolved from dinosaurs. That is because, surprisingly for the evolutionist, Ornithischian dinosaurs do not resemble birds with respect to other anatomical features. For instance, *Ankylosaurus* is a dinosaur classified as *Ornithischian*, with short legs, a giant body, and skin covered with scales resembling armor. On the other hand, *Struthiomimus*, which resembles birds in some of its anatomical features (long legs, short forelegs, and thin structure), is actually a *Saurischian*. (5)

THE UNIQUE STRUCTURE OF AVIAN LUNGS

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

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

In birds however, air follows just one direction through the lungs. The entry and exit orifices are completely different, and thanks to special air sacs all along the passages between them, air always flows in one direction through the avian lung. In this way, birds are able to take in air nonstop. This satisfies birds' high energy requirements. Michael Denton, an Australian biochemist and a well-known critic of Darwinism, explains the avian lung in this way:

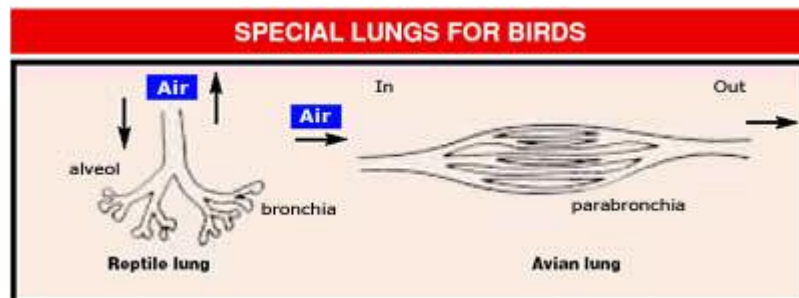
This one-directional flow of air is maintained in breathing in and breathing out by a complex system of interconnected air sacs in the bird's body, which expand and contract in such a way as to ensure a continuous delivery of air through the parabronchi... The structure of the lung in birds, and the overall functioning of the respiratory system, are quite unique. No lung in any other vertebrate species in any way approaches the avian system. Moreover, in its essential details it is identical in birds. (6)

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

Michael Denton also states that it is impossible to give an evolutionary account of the avian lung:

...In the case of birds, however, 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. ...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 barbs 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. (7)

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



Reptiles (and mammals) breathe in and out from the same air vessel. In birds, while the air enters into the lung from the front, it goes out from the back. This distinct design is specially made for birds, which need great amounts of oxygen during flight. It is impossible for such a structure to evolve from the reptile lung.

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

The earliest stages in the derivation of the avian abdominal air sac system from a diaphragm-ventilating ancestor would have necessitated selection for a diaphragmatic hernia in taxa transitional between theropods and birds. Such a debilitating condition would have immediately compromised the entire pulmonary ventilatory apparatus and seems unlikely to have been of any selective advantage. (8)

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

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... 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. (9)

In other words, the passages in birds' lungs are so narrow that the air sacs inside their lungs cannot fill with air and empty again, as with land-dwelling creatures. If a bird lung ever completely deflated, the bird would never be able to re-inflate it, or would at the very least have great difficulty in doing so. For this reason, the air sacs situated all over the lung enable a constant passage of air to pass through, thus protecting the lungs from deflating. Of course this system, which is completely different from the lungs of reptiles and other vertebrates, and is based on the most complex design, cannot have come about with random mutations, stage by stage, as evolution maintains. Thus, as Denton also mentions, the avian lung is enough to answer 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." (10)

BIRD FEATHERS AND REPTILE SCALES

Another impassable gap between birds and reptiles is feathers, which are peculiar to birds. Reptile bodies are covered with scales, a completely different structure. The hypothesis that bird feathers evolved from reptile scales is completely unfounded, and is indeed disproved by the fossil record, as the evolutionist paleontologist Barbara Stahl once admitted:

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. (11)

A. H. Brush, a professor of physiology and neurobiology at the University of Connecticut, accepts this fact, although he is himself an evolutionist: "Every feature from gene structure and organization, to development, morphogenesis and tissue organization is different [in feathers and scales]." (12) Moreover, Professor Brush examines the protein structure of bird feathers and argues that it is "unique among vertebrates." (13)

There is no fossil evidence to prove that bird feathers evolved from reptile scales. On the contrary, feathers appear suddenly in the fossil record, Professor Brush observes, as an "undeniably unique" character distinguishing birds. (14) Besides, in reptiles, no epidermal tissue has yet been detected that provides a starting point for bird feathers. (15)

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

Feathers are features unique to birds, and there are no known intermediate structures between reptilian scales and feathers. Notwithstanding speculations on the nature of the elongated scales found on such forms as *Longisquama* (discovered 1969 Russia) ... as being featherlike structures, there is simply no demonstrable evidence that they in fact are. (16)

More recently, Feduccia, quoting Brush, has the following passage on the origin of feathers:

Even birds' most scalelike features-the leg scutes (scales), claws, and the epidermally derived beak-are formed from a single category of protein, the -keratins. As Alan Brush has written regarding feather development, "The genes that direct synthesis of the avian -keratins represent a significant divergence from those of their reptilian ancestor." (17) (Note that the authors assume a reptilian ancestor for birds, but accept the genetic gap between these.)

All news about "dino-birds" is speculative. Many claims on the subject have turned out to be false. For example, the "feathered dinosaur" claim that was put forward in 1996 with a great media fanfare was also disproved soon. A reptilian fossil called *Sinosauropteryx* was found in China, but paleontologists who examined the fossil said that it had bird feathers, unlike modern reptiles. Examinations conducted one year later, however, showed that the fossil actually had no structure similar to a bird's feather. (18)

Every other fossil that has been put forward as "feathered dinosaur" in the last 10 years is debatable. Detailed studies have revealed that the structures suggested to have been "feathers" are actually collagen fibers. (19) The speculations in fact stem from evolutionist prejudice and wishful thinking. As Feduccia says, "Many dinosaurs have been portrayed with a coating of aerodynamic contour feathers with absolutely no documentation." (20) (One of the "feathered dinosaurs" in question, namely *Archaeopteryx*, proved to be a fossil forgery).

Feduccia sums the position up in these terms: "Finally, no feathered dinosaur has ever been found, although many dinosaur mummies with well-preserved skin are known from diverse localities." (21)



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

THE DESIGN OF FEATHERS

Another problem for the evolutionists is the fact that there is such a complex design in bird feathers that the phenomenon can never be accounted for without referring to intelligent design. As we all know, there is a long, stiff part that runs up the center of the feather. Attached to the shaft are the vanes. The vane is made up of small thread-like strands, called barbs. These barbs, of different lengths and rigidity, are what give the flying bird its

aerodynamic nature. But what is even more interesting is that each barb has thousands of even smaller strands attached to them called barbules. The barbules are connected to barbicels, with tiny microscopic hooks, called hamuli. Each strand is hooked to an opposing strand, much like the hooks of a zipper. On just one crane feather, there are up to 650 hairs on the central tube. Each one of these is covered with some 650 tinier hairs. And these tiny hairs are linked together by 350 hooks. The hooks come together like the two sides of a zipper. If the hooks come apart for any reason, it is sufficient for the bird to shake itself, or, in more serious cases, to straighten its feathers out with its beak, for the feathers to return to their previous positions. To claim that the complex design in feathers could have come about by the evolution of reptile scales through chance mutations is quite simply a dogmatic belief with no scientific foundation. Even one of the doyens of Darwinism, Ernst Mayr, made this confession on the subject some years ago:

It is a considerable strain on one's credulity to assume that finely balanced systems such as certain sense organs (the eye of vertebrates, or the bird's feather) could be improved by random mutations. (22)

The design of feathers also compelled Darwin to ponder them. Moreover, the perfect aesthetics of the peacock's feathers had made him "sick" (his own words). In a letter he wrote to Asa Gray on April 3, 1860, he said, "I remember well the time when the thought of the eye made me cold all over, but I have got over this stage of complaint..." And then continued: "... and now trifling particulars of structure often make me very uncomfortable. The sight of a feather in a peacock's tail, whenever I gaze at it, makes me sick!" (23)

In short, the enormous structural differences between bird feathers and reptile scales, and the astonishingly complex-and beautiful-design of feathers, clearly demonstrate the invalidity of the claim that feathers evolved from scales through blind natural mechanisms.

CONCLUSION

The "dino-bird" stories that appear in the evolutionist press consist of biased analyses by evolutionist palaeontologists, and sometimes even of distortions of the truth. (In fact, one of the best-known "dino-bird" discoveries, the *Archaeoraptor* portrayed by *National Geographic* as incontrovertible proof of bird evolution, turned out to be a forgery produced by combining fossils of five separate specimens). The "dino-bird" fossils in question are either those of extinct species of bird or of dinosaurs, and not one of them represents a "missing link" between birds and dinosaurs. In fact, as we have seen above, it is impossible for dinosaurs to have evolved into birds and assumed bird characteristics by means of chance mutations.

Thus the "dino-bird" hype that rages through the media consists of nothing more than a last-ditch attempt to shore up the collapsed theory of evolution. However, science and reason will always prevail over such misconceptions.

LATEST EVIDENCE: OSTRICH STUDY REFUTES THE DINO-BIRD STORY

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

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

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

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



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

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

have just reported, **there is the time problem in that superficially bird-like dinosaurs occurred some 25 million to 80 million years after the earliest known bird**, which is 150 million years old."

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

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

i - David Williamson, "Scientist Says Ostrich Study Confirms Bird 'Hands' Unlike Those Of Dinosaurs", EurekAlert, 14-Aug-2002, http://www.eurekalert.org/pub_releases/2002-08/uonc-ss081402.php

ii - David Williamson, "Scientist Says Ostrich Study Confirms Bird 'Hands' Unlike Those Of Dinosaurs", EurekAlert, 14-Aug-2002, http://www.eurekalert.org/pub_releases/2002-08/uonc-ss081402.php

- (1) Alan Feduccia, *The Origin and Evolution of Birds*, Yale University Press, 1999, p. 81
- (2) Scott F. Gilbert, "Did Birds Evolve from the Dinosaurs?," *Developmental Biology*, Sixth Edition, chapter 16.4 (<http://www.devbio.com/chap16/link1604.shtml>)
- (3) Pat Shipman, "Birds Do It... Did Dinosaurs?," *New Scientist*, February 1, 1997, p. 28
- (4) Pat Shipman, "Birds Do It... Did Dinosaurs?," *New Scientist*, February 1, 1997, p. 28
- (5) Duane T. Gish, *Dinosaurs by Design*, Master Books, AR, 1996. pp. 65-66
- (6) Michael Denton, *Evolution: A Theory in Crisis*, London, Burnett Books Limited, 1985, p. 210-211.
- (7) Michael Denton, *A Theory in Crisis*, Adler & Adler, 1986, pp. 210-212.
- (8) J. A. Ruben, T. D. Jones, N. R. Geist, and W. J. Hillenius, "Lung Structure And Ventilation in Theropod Dinosaurs and Early Birds," *Science*, vol. 278, p. 1267.
- (9) Michael J. Denton, *Nature's Destiny*, Free Press, New York, 1998, p. 361.
- (10) Charles Darwin, *The Origin of Species: A Facsimile of the First Edition*, Harvard University Press, 1964, p. 189
- (11) Barbara J. Stahl, *Vertebrate History: Problems in Evolution*, Dover, 1985, pp. 349-350.
- (12) A. H. Brush, "On the Origin of Feathers," *Journal of Evolutionary Biology*, vol. 9, 1996, p.132.
- (13) A. H. Brush, "On the Origin of Feathers," *Journal of Evolutionary Biology*, vol. 9, 1996, p.131.
- (14) A. H. Brush, "On the Origin of Feathers," *Journal of Evolutionary Biology*, vol. 9, 1996, p.133.
- (15) A. H. Brush, "On the Origin of Feathers," *Journal of Evolutionary Biology*, vol. 9, 1996, p.131.
- (16) Alan Feduccia, "On Why Dinosaurs Lacked Feathers," *The Beginning of Birds*, Eichstatt, West Germany: Jura Museum, 1985, p. 76.
- (17) Alan Feduccia, *The Origin and Evolution of Birds*, Yale University Press, 1999, p. 128
- (18) Ann Gibbons, "Plucking the Feathered Dinosaur," *Science*, vol. 278, no. 5341, 14 November 1997, pp. 1229 - 1230
- (19) Ann Gibbons, "Plucking the Feathered Dinosaur", *Science*, volume 278, Number 5341 Issue of 14 Nov 1997, pp. 1229 - 1230
- (20) Alan Feduccia, *The Origin and Evolution of Birds*, Yale University Press, 1999, p. 130
- (21) Alan Feduccia, *The Origin and Evolution of Birds*, Yale University Press, 1999, p. 132
- (22) Ernst Mayr, *Systematics and the Origin of Species*, Dove, New York, 1964, p. 296.
- (23) Francis Darwin, *The Life and Letters of Charles Darwin*, Volume II, From Charles Darwin to Asa Gray, April 3rd, 1860