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Archaeopteryx: A Connecting Link or a True Bird?

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Abstract: Evolutionists claim that *Archaeopteryx* is a transitional representative having certain characters of dinosaurs. The fossils of bird remains are the rarest of all land vertebrates because of the hollow and fragile nature of their skeletons. *Archaeopteryx* as a transitional form is promoted by evolutionists, probably to dismiss the Darwinian theory. According to paleontologists, *Archaeopteryx* is a feathered dinosaur. But still it is a matter of debate that *Archaeopteryx* is a connecting link or a true bird.

Key words: Archaeopteryx · Connecting link · Fossil

INTRODUCTION

The theory of evolution is primarily based on the available fossil records. Fossil remains predominantly appear in sedimentary rocks originally laid down by a succession of deposits in seas, lakes, riverbeds and deserts. Some paleontological findings strongly supported the Dariwinian theory during his lifetime, one was the discovery in 1861 of a true "missing link", approximately midway between reptiles and birds, was named *Archaeopteryx* [1]. The fossils of *Archaeopteryx* were found in upper Jurassic limestone deposits in Bavaria. It had a number of reptilian features, including teeth, separate clawed fingers and a tail of twenty one vertebrae, but also had a number of birds like features such as feathers and beak. The theory of evolution claims that the ancestors of birds were dinosaurs. The question arises that, "How dinosaurs turned into bird? The evolutionists stated two theories in support of it (a) arboreal theory (b) cursorial theory. According to arboreal theory arboreal reptiles that used their developing wings to glide from branch to branch turned into birds and according to cursorial theory, ground dwelling creatures whose primitive feathers formed planning surfaces enabling them to increase their running speed turned into birds. Some evolutionist claims that "dinosaurs grew wings while trying to catch flies [1].

TRANSITIONAL FORM

According to evolutionists *Archaeopteryx* lived approximately 150 million years ago. It is assumed as a transitional form that branched off from the dinosaurs stock and started to fly like present day birds. However, the recent studies of *Archaeopteryx* fossils indicate that it is not a transitional form but is an extinct species of bird. Evolutionist's claims that it lacks structure due to which it could not fly properly. Sternum is a bone which is present in all flying and non-flying birds, to which flight muscles are attached. In 1993, *Archaeopteryx* fossil, was discovered and it proves the presence of sternum (rectangular shaped) in it [2]. According to Paleontologist Robert Caroll, the geometry as well as their arrangement of the flight feathers of *Archaeopteryx* is identical with that of modern flying birds [3]. Evolutionists also claim *Archaeopteryx* as transitional form by giving the points such as presence of claws on its wing and its teeth. The living groups of bird, the touraco and the hoatzin, have claws, which help them to hold onto branches [2]. Hence, it is clear that the transitional form cannot be explained by the presence of claws and teeth. Claws and teeth are not typical reptilian feature and *Archaeopteryx* is not the only bird species to possess teeth. According to well known ornithologists, L.D. Martin, J.D. Stewart and K.N. Whetstone, *Archaeopteryx* have unserrated teeth with constricted bases and expanded root but, the alleged ancestors of the *Archaeopteryx* had serrated teeth with straight root [4].

ANATOMICAL STUDIES

Studies of anatomical features by John Ostrom, a leading authority on the subject claims that

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Archaeopteryx evolved from dinosaurs. S. Tarsitano, M.K. Hecht and A.D. Walker have revealed the similarities observed by J. Ostrom as misinterpretation. According to A.D. Walker there is much similarity in the ear region of *Archaeopteryx* and the modern birds [2]. Alan Feduccia [5] argues that there are major anatomical differences between birds and dinosaurs, such as the embryological origin of their forelimbs digits, dinosaur three fingered hand is composed of digits 1, 2 and 3, whereas the bird forelimb uses digits 2, 3 and 4. Richard L. Deem, the American biologists in his article *"The Demise of the Birds Are Dinosaurs Theory"*, also supports Feduccia's argument and further states that the theropod forelimb is much smaller than that of *Archaeopteryx*. The vast majority of the theropod lack semilunate wrist bone and have large number of other wrist elements which have no homology to the bones of *Archaeopteryx* [5]. Alan Feduccia and Julie Nowicki of the University of North Carolina at Chapel Hill studied a series of live ostrich eggs and concluded that, there cannot be an evolutionary link between birds and dinosaurs. They argued that whatever the ancestor of birds was, it must have had five fingers, not the three fingered hand of theropod dinosaurs. There are also differences in the method of tooth implantation and replacement among dinosaur and birds [2].

FOSSIL STUDIES

Feduccia also argued that why bird like dinosaur theropods such as *Velociraptor* first occurs 80 million years later than *Archaeopteryx*, whereas triassic therapods that are contemporary with *Archaeopteryx* have few, if any specifically bird like features. A number fossils discovered and supported the evolution of birds from dinosaurs have been proved wrong. In this series, *Sinosauropteryx* discovered in China in 1996 was presented as 'feathered dinosaur'. Larry Martin of Kansas University, Lawrence, thinks that the structures are frayed collagenous fibers beneath the skin and have nothing to do with birds [6]. Another fossil discovered in China in 1999, *Arachaeoraptor liaoningensis* was proved as a fake fossil and was skillfully constructed from five separate specimens. In this fossil some primitive bird bones and a non-flying dromaeosaurid dinosaur was combined. It was a product of a Chinese evolutionist, by using glue and cement from eighty eight bones and stones [7]. The skeleton of *Archaeopteryx* had pneumatized vertebrae and pelvis, which indicates the presence of both a cervical and abdominal air sac [8-9]. Further the analysis of the skull with computer tomography scanning shows that *Archaeopteryx* had a brain like a modern birds. The inner ear's cohlea and semicircular canals were in the same proportions as in the modern birds. This proves that *Archaeopteryx* had the sense of balance required for coordinating flight [10].

CONCLUSION

On the basis of above facts it can be concluded that *Archaeopteryx* was not the transitional form. The fossil record proves that today's modern bird and some archaic birds such as *Archaeopteryx* and *Confuciusornis* lived together at the same time. *Archaeopteryx* and *Confuciusornis*, have become extinct, but some of the species of modern birds that once existed have been able to survive down to the present day and there is no transitional form which can be proved by the available fossil records.

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